



## **Implementation of the ‘Do No Significant Harm’ principle in Candriam’s ESG Analysis, under the Sustainable Finance Disclosure Regulation (SFDR)**

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# 1. Context

Under article 2(17) of the European Union's Sustainable Finance Disclosure Regulation (EU Regulation 2019/2088 - SFDR), a 'Sustainable Investment' is defined<sup>2</sup> as an investment:

- **(1) in an economic activity that contributes to an environmental objective**, as measured, for example, by key resource efficiency indicators on the use of energy, renewable energy, raw materials, water and land, on the production of waste, and greenhouse gas emissions, or on its impact on biodiversity and the circular economy;
- **(2) or an investment in an economic activity that contributes to a social objective**, in particular an investment that contributes to tackling inequality or that fosters social cohesion, social integration and labour relations, or an investment in human capital or economically or socially disadvantaged communities;
- **(3) provided that such investments 'Do No Significant Harm'** to any of those objectives;
- and **(4) that the investee company follows good governance practices**, in particular with respect to sound management structures, employee relations, remuneration of staff and tax compliance.

Under the SFDR, the aforementioned principle of '**Do No Significant Harm**' (DNSH) **is linked to the consideration of two key elements**:

- the **Principal Adverse Impacts (PAIs)** of investment decisions on sustainability factors
- the alignment of investments with the '**minimum safeguards**' set out in Regulation (EU) 2020/852<sup>3</sup>.

**PAIs** are defined as negative, material (or likely-to-be material) effects on sustainability factors (such as environmental, social and employee matters, respect for Human Rights, anti-corruption and anti-bribery matters) that are caused, compounded by, or directly linked to investment decisions and advice performed by the legal entity, i.e. Candriam.

SFDR sets out 18 mandatory PAIs, including indicators relative to greenhouse gas emissions, energy performance, biodiversity, water and waste, as well as social and governance indicators. Most of the PAIs are related to corporate issuers, some to sovereigns. Additionally, there are 46 optional PAIs related to various sustainability factors.

**Minimum safeguards** refer to the Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises and the UN Guiding Principles on Business and Human Rights, including the principles and rights set out in the eight fundamental conventions identified in the

<sup>2</sup> For more information on Candriam's implementation of the overall Sustainable Investment definition under SFDR, please refer to <https://www.candriam.com/en-fr/professional/sfdr/#definitions-and-methodologies>

<sup>3</sup> Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment.

Declaration of the International Labour Organisation on Fundamental Principles on Rights at Work and the International Bill of Human Rights.

**This document outlines how Candriam integrates the DNSH principle within its proprietary ESG analytical frameworks for corporate and sovereign issuers.**



## 2. Consideration of PAIs and assessment of Minimum safeguards

PAIs and minimum safeguards are distinct yet interconnected components of the DNSH assessment. While minimum safeguards establish the regulatory framework for compliance with international standards, PAIs aim to provide measurable indicators that identify and evaluate potential risks to environmental and social sustainability. Both PAIs and minimum safeguards are central elements to Candriam's sustainable investment approach.

- **PAIs**

PAIs are considered in our ESG analytical frameworks through three complementary steps:

- Negative screening
- ESG assessment
- Stewardship (engagement and voting)

Candriam's ESG Investments and Research Team has developed holistic ESG analytical frameworks for both corporate and sovereign issuers. Issuers are analysed from environmental, social and governance perspectives, resulting in ESG assessments that take into account the PAIs of these issuers. This integration of PAIs into ESG analysis is guided by the analytical materiality of each indicator, i.e. the specific relevance of each indicator for different sectors. Materiality depends on several factors, such as information type, data quality and breadth, applicability, relevance, and geographical coverage. This is particularly important for investee companies that are not subject to mandatory sustainability disclosure obligations, such as those outlined in the Corporate Sustainability Reporting Directive (CSRD).

In addition to the integration of PAIs into our ESG analysis via negative screening, overall ESG assessments, and stewardship, Candriam has also implemented a PAI monitoring process.

The integration of PAIs and the monitoring process are described in further detail in the sections that follow.

### **Minimum safeguards**

The DNSH principle is integrated into Candriam's negative screening process for both corporate and sovereign issuers, ensuring alignment with the minimum safeguards under the SFDR. This approach allows us to evaluate compliance with these safeguards by focusing on adherence to international norms and conventions, while also facilitating the exclusion of activities that pose significant harm to environmental or social sustainability.

## 2.1. Corporate issuers

### 2.1.1. Consideration of PAIs and minimum safeguards in ESG analysis

As outlined above, Candriam has defined three complementary steps for incorporating **PAIs** into its ESG research and analysis:

- Negative screening
- ESG assessment
- Stewardship (engagement and voting)

The tables that follow show how each of the PAIs is covered by these complementary steps.

CANDRIAM'S CORPORATE SUSTAINABILITY FRAMEWORK															
		Overall ESG assessment											Negative Screening		Stewardship
	Main Sectors Concerned <sup>1</sup>	Business Activities					Stakeholder Management						Controversial activities	Norms-based	Engagement & Voting
		Climate change	Resource depletion	Demographic Evolution	Health & Wellbeing	Digitalisation	Environment	Society	Employees	Suppliers	Customers	Investors			
Indicators applicable to investments in investee companies															
Climate and other environmental-related indicators															
PAI 1. GHG emissions	Utilities, Mining, Energy, Construction	X <sup>2</sup>					X								X
PAI 2. Carbon footprint	Utilities, Mining, Energy, Construction	X <sup>2</sup>					X								X
PAI 3. GHG intensity of investee companies	Utilities, Mining, Energy, Construction	X <sup>2</sup>					X						X <sup>3</sup>		X
PAI 4. Exposure to companies active in the fossil fuel sector	Utilities, Mining, Energy, Transportation	X	X				X						X		X
PAI 5. Share of non-renewable energy consumption and production	Utilities, Energy	X	X				X						X <sup>3</sup>		X
PAI 6. Energy consumption intensity per high-impact climate sector	Utilities, Mining, Energy	X	X				X								X
PAI 7. Activities negatively affecting biodiversity-sensitive areas	Utilities, Mining, Energy		X				X							X <sup>3</sup>	X
PAI 8. Emissions to water	Utilities, Mining, Energy		X				X							X <sup>3</sup>	X
PAI 9. Hazardous waste and radioactive waste ratio	Utilities, Mining, Energy		X				X							X <sup>3</sup>	X
Social and employees, respect for human rights, anti corruption ant anti-bribery matters															
PAI 10. Violations of UN GC principles and OECD Guidelines for Multinational Enterprises	All											X		X	X
PAI 11. Lack of processes and compliance mechanisms to monitor compliance with UN GC principles and OECD Guidelines for Multinational Enterprises	All											X			X
PAI 12. Unadjusted gender pay gap	All								X				X		X
PAI 13. Board gender diversity	All								X				X		X
PAI 14. Exposure to controversial weapons (anti-personnel mines, cluster munitions, chemical weapons, and biological weapons)	Electrical Equipment, Machinery, Aerospace & Defense												X		X

CANDRIAM'S CORPORATE SUSTAINABILITY FRAMEWORK														
		Overall ESG assessment										Negative Screening		Stewardship
	Main Sectors Concerned <sup>1</sup>	Business Activities					Stakeholder Management					Controversial activities	Norms-based	Engagement & Voting
		Climate change	Res-source depletion	Demographi- c Evolution	Health & Wellness	Digital- isation	Environ- ment	Society	Employees	Suppliers	Customers			
Optional Indicators applicable to investments in investee companies														
Climate and other environmental-related indicators														
PAI 2. Emissions of air pollutants	Utilities, Mining, Energy	X			X									X
PAI 4. Investments in companies without carbon emission reduction initiatives	Utilities, Mining, Energy, Construction	X			X									X
Social and employees, respect for human rights, anti corruption ant anti-bribery matters														
PAI 4. Lack of a supplier code of conduct	Retailing, Energy, Mining, Paper & Forest								X		X		X <sup>3</sup>	X
PAI 5. Lack of grievance/complaints handling mechanism related to employee matters	Retailing, Energy, Mining, Paper & Forest							X			X		X <sup>3</sup>	X
PAI 6. Insufficient whistleblower protection	Retailing, Energy, Mining, Paper & Forest										X			X
PAI 8. Excessive CEO pay ratio	Bank, Auto, Energy, Mining, Machinery										X			X
PAI 9. Lack of a human rights policy	Auto, Energy, Mining, Food Beverage & Tobacco								X		X		X <sup>3</sup>	X
PAI 14. Number of identified cases of severe human rights issues and incidents	Real Estate, Construction, Mining, Energy, Retailing							X			X		X	X
PAI 15. Lack of anti-corruption and anti-bribery policies	Real Estate, Construction, Mining, Enervg, Machinery										X		X <sup>3</sup>	X

<sup>1</sup> Non exhaustive list of material sectors

<sup>2</sup> Indirectly integrated

<sup>3</sup> Partially integrated

The negative screening process that is part of our ESG analytical framework not only addresses PAIs; it also serves to ensure **minimum safeguards** are respected, in accordance with the SFDR's requirements pertaining to the DNSH principle.

The way in which this negative screening process considers PAIs and minimum safeguards, and the means by which PAIs are considered in our overall ESG assessments and in our stewardship activities are described in detail below.

### 2.1.1.1. Negative screening

PAIs and minimum safeguards, the cornerstones of the DNSH principle, are considered via our negative screening process, which encompasses Controversial Activities Analysis and Norms-based Analysis:

- Controversial Activities Analysis**

Candriam's Controversial Activities Analysis is essential in implementing the DNSH principle as it identifies issuers that carry out activities that exhibit a very negative profile from both a sustainability and financial perspective. The potential harm these activities do to environmental and social objectives and the risks associated with investing in these activities - such as systemic and reputational risks - cannot be offset by financial gains.

Candriam excludes issuers involved in such activities according to revenue thresholds and other criteria set out in our Exclusion Policy. For example, at company-wide level, Candriam excludes companies involved in the development, production, testing, maintenance, and sale of controversial



weapons, as well those involved in activities such as thermal coal, oil and gas extraction and high-energy-intensity operations. Moreover, companies directly involved in the manufacturing of tobacco products are excluded from all of our investments, as well as those deriving more than 5% of their revenues from retailing of tobacco products<sup>4</sup>.

- **Norms-based Analysis**

Candriam's Norms-based Analysis determines whether a company complies with the 10 principles of the United Nations Global Compact (UNGC) in the areas of Human Rights, Labour, Environment and Anti-Corruption. The analysis also assesses whether companies are in violation of the principles of the OECD Guidelines for Multinational Enterprises. The exclusions resulting from this analysis allow us to implement the DNSH principle, ensuring investments respect key principles and indicators and hence do not harm a range of environmental and social domains.

Moreover, this analysis ensures that minimum safeguards are in place. In fact, our analysis covers the aforementioned UNGC and OECD Guidelines for Multinational Enterprises, as well as the UN Guiding Principles on Business and Human Rights as well as the core principles of the International Labour Organisation's conventions on Labor Rights and protections in the International Bill of Human Rights.

### 2.1.1.2. ESG assessment

In addition to the negative screening process, Candriam also integrates the DNSH principle, and in particular the PAIs, via its ESG assessment. This assessment is done using Candriam's proprietary ESG analytical framework. The framework is applied at two levels: First, to examine and score the overall sustainability of each issuer and second, to measure each issuer's environmental and social contributions. The way in which PAIs are considered in each of these analytical levels is described below.

- **Overall ESG assessment**

To conduct an overall, in-depth ESG assessment of each issuer, Candriam deploys its proprietary ESG analytical framework, which is based on a two-pronged approach:

- **Business Activities Analysis:** This analytical step examines *what* a company does, i.e. its activities. It is a strategic assessment of how a company's activities impact – adversely or positively – a range of Key Sustainable Challenges, including Climate change, Resource Depletion, Health & Wellness, Digitalisation and Demographic Evolution. Thus, this step allows us to identify the potential PAIs of companies' activities, in particular climate and other environment-related PAIs. As a result of the Business Activity Analysis, each company receives a **Business Activity Score**, that encapsulates the company's activities impact on the aforementioned Key Sustainability Challenges. This means that activities with negative

<sup>4</sup> Candriam's full Exclusion Policy is available at the following link:  
<https://www.candriam.com/siteassets/medias/publications/brochure/corporate-brochures-and-reports/exclusion-policy/candriam-exclusion-policy-en.pdf>

externalities receive a negative score based on scientifically determined rationales and performance metrics (e.g. CO2/Kw).

- **Stakeholder Analysis:** This analysis assesses *how* a company interacts with its stakeholders, including the Environment, Society, Customers, Suppliers, Investors and Employees. By evaluating the impacts, a company has on these stakeholders' long-term interests, this analysis allows us to address a range of PAIs, in particular in the social domain and those related to employees, Human Rights, corruption and bribery. Each company is given a **Stakeholder Score** which reflects these elements.

Importantly, our analytical framework integrates the notion of materiality – meaning that different Key Sustainability Challenges and Stakeholders, and therefore different PAIs, have different levels of relevance for different sectors. For example, for sectors with high climate stakes, our analysis places particular emphasis on how these companies can avoid or reduce adverse environmental impacts. Using for example internationally recognised studies of key sectors contributing to global greenhouse gas (GHG) emissions, sectoral progress frameworks from the International Energy Agency and Net Zero progress assessments, our analysis in these sectors will emphasise the impact of Business Activities on Climate change, as well as on the Environment as a Stakeholder. This includes GHG emissions (PAI 1), the carbon footprint (PAI 2), GHG intensity (PAI 3), and the exposure to companies active in the fossil fuel sector (PAI 4).

The Business Activity and Stakeholder Scores, which gives a quantitative embodiment to the notion of adverse impacts, ensure that PAIs are concretely and methodologically integrated into the definition of sustainable investment universes, in alignment with SFDR. In fact, the Business Activity Score, together with the Stakeholder Score, results in an overall ESG Rating, ranging from ESG 1 (sustainability leader) to ESG 10 (sustainability laggard / detrimental). This Rating sets a quantitative threshold serves is the first criterion for meeting the definition of 'Sustainable Investment' outlined in SFDR. It also embodies a quantitative translation of the integration of the PAIs and DNSH principle into our definition of sustainable investment universes. Developed market issuers must achieve an ESG Rating between ESG 1 and ESG 5, while Emerging Market and High-yield issuers must achieve a rating between ESG 1 and ESG 6.

For information on the other criteria that must be met to qualify an issuer as a Sustainable Investment, as well as quantitative thresholds, please refer to Candriam's Sustainable Investment Definition at <https://www.candriam.com/en-fr/professional/sfdr/#definitions-and-methodologies>.

This document also provides a detailed description of Candriam's overall ESG assessment process and of how this process, in addition to the integration of PAIs, also allows us to evaluate and quantify the positive impacts of a company's activities, policies and practices, as well as the sustainability-related risks and opportunities it is exposed to.

- **Assessment of contributions to an environmental and/or social objective**

In addition to integrating PAIs via the overall ESG assessment described above, Candriam also integrates the DNSH principle and PAIs via a dedicated process that evaluates companies' contributions to environmental (E) and social (S) objectives<sup>5</sup>. This process draws on specific elements of the two distinct but complementary analytical approaches that characterise Candriam's overall ESG assessment: Business Activity Analysis and Stakeholder Analysis.

- **Environmental Contribution**

To determine companies' Environmental Contribution, we combine the Business Activity angle (what a company does, i.e. a sustainability perspective) with the Stakeholder angle (how a company operates, i.e. a responsibility perspective). We crystallise companies' activities' contributions to and impacts on Climate Change, Resource Depletion, and, where relevant, Digitalisation as well as companies' management of environmental matters. In this analysis, PAIs are integrated to assess in particular companies' negative environmental externalities and to mitigate investments adverse impacts in these areas, in order to ensure that no significant harm is done to environmental objectives. This includes for example an evaluation of greenhouse gas emissions, carbon footprint, biodiversity loss, pollution, water and waste management, and resource inefficiencies.

- **Social Contribution**

For Social Contributions, Candriam examines companies' activities impacts to the health and well-being of society. Further, we examine contribution and exposure to Digitalisation in sectors<sup>6</sup> in which it is important to assess how companies address societal and economic challenges through innovations such as smart cities, telehealth care and cybersecurity, and in which companies have adverse impacts through practices related to streaming, gaming, or unethical data practices.

At the Stakeholder level, we analyse companies' impacts on Employees and Suppliers. For Employees, we evaluate labour practices and policies, including workplace safety, employee well-being, and fair treatment. For Suppliers, we examine among other factors, responsible sourcing, sustainable procurement, and Human Rights enforcement across the value chain. As part of this evaluation, PAIs are integrated to identify and mitigate negative social effects of investments, including labour rights violations and inadequate mechanisms to comply with OECD Guidelines and the UNGC principles in order to ensure no significant harm is done to social objectives.

The assessment described above result in an **Environmental Contribution Score** and a **Social Contribution Score** for each company, ranging from 0 (very negative contribution) to 100 (very positive

<sup>5</sup> As defined under the SFDR, Article 2(17) (EU Regulation 2019/2088) these contributions are (1) economic activities that contribute to environmental outcomes, for example measured by resource efficiency indicators like energy use, GHG emissions, waste production, and biodiversity impacts, or (2) economic activities that contribute to social objectives, such as investments tackling inequality and fostering social cohesion.

<sup>6</sup> For additional information on sector-specific considerations with regards to Environmental and Social Contributions, please refer to Candriam's Sustainable Investment Definition at <https://www.candriam.com/en-fr/professional/sfdr/#definitions-and-methodologies>.

contribution). Companies must achieve a minimum score of 50 in either environmental or social contribution, depending on their sector<sup>7</sup>, in order to be eligible for Sustainable Investment<sup>8</sup>. Such a quantitative transposition of our analysis, including of PAIs, ensures that the DNSH principle is concretely and systematically integrated into our Sustainable Investment universes.

### **2.1.1.3. Stewardship (engagement and voting)**

Candriam's engagement activities contribute to avoiding or mitigating PAIs via dialogue and voting<sup>9</sup>, and are hence an additional lever in integrating the DNSH principle.

We prioritise engagements based on the most material and relevant ESG challenges confronting industries and issuers by considering the most important PAIs, as well as the repercussions on companies' activities, stakeholders, and society.

For each dialogue we initiate and for every vote we cast at special or annual general shareholder meetings, we assess the connection with PAIs. Our engagement (and escalation) choices also take into consideration our list of issuers exhibiting high PAI data, which in turn feeds our engagement watchlist. The relationships between engagement activities and PAIs are documented in detail in a dedicated, proprietary engagement tool, and reported on in our Annual Engagement Report, as well as in the PAI Entity Statement and Periodic Disclosure (PRD) Statement under the SFDR.

Naturally, PAIs 1 through 6<sup>10</sup> are affected by our campaign dedicated to Net Zero Engagement, while our voting activities, when pertaining to the appointment of directors, systematically address PAI 13 (board gender diversity).

PAI 11 (Lack of processes and compliance mechanisms to monitor compliance with UN GC principles and OECD Guidelines for Multinational Enterprises) is addressed through initiatives such as our annual engagement campaign targeting issuers with a significant presence in Oppressive Regimes. Issuers in high-risk areas must demonstrate they have appropriate policies, governance structures, and practices in place to map, assess, manage, mitigate and remediate Human Rights risks.

## **2.1.2. PAI monitoring process**

As outlined above, Candriam integrates the DNSH principles, and specifically minimum safeguards and PAIs, via three levers: Negative screening, ESG assessment, and Stewardship (engagement and voting). In addition, we have implemented a PAI monitoring process. The process serves as an

<sup>7</sup> For additional information on sector-specific requirements with regards to Environmental and Social Contributions, please refer to Candriam's Sustainable Investment Definition at <https://www.candriam.com/en-fr/professional/sfdr/#definitions-and-methodologies>.

<sup>8</sup> For information on the other criteria that must be met to qualify an issuer as a Sustainable Investment, please refer to Candriam's Sustainable Investment Definition at <https://www.candriam.com/en-fr/professional/sfdr/#definitions-and-methodologies>.

<sup>9</sup> For Candriam's Engagement Policy, please refer to [engagement\\_policy\\_en.pdf](#). For Candriam's Voting Policy, please refer to [proxy\\_voting\\_policy\\_en.pdf](#).

<sup>10</sup> PAI 1: GHG emissions, PAI 2: Carbon footprint, PAI 3: GHG intensity of investee companies, PAI 4: Exposure to companies active in the fossil fuel sector, PAI 5: Share of non-renewable energy consumption and production, PAI 6: Energy consumption intensity per high impact climate sector

additional layer that ensures the in-depth integration of PAIs and of the DNSH principle into our sustainable investment decisions.

This process is performed by the ESG Team in collaboration with Candriam's Risk Management Team. It is focused on issuers exhibiting outlier characteristics, which is to say very high PAI figures. Specifically, each month the Risk Management Team identifies issuers with PAI data higher than the 97.5<sup>th</sup> percentiles of their respective benchmarks. Two benchmark types are considered here: One for developed market investment-grade issuers (e.g., MSCI World, iBoxx Euro Corporate) and one for emerging market and high-yield issuers (e.g., MSCI Emerging Markets, ICE Global High Yield).

For such issuers, the ESG Team conducts an in-depth, nuanced assessment on PAIs currently under consideration and that are neither binary (Yes, No) nor percentages. This assessment is qualitative in nature rather than relying purely on hard exclusions based on absolute thresholds. In fact, we take into consideration the quality of data sourced from external providers as well as each company's specific circumstances and the actions it takes to mitigate PAIs. This approach allows for a comprehensive evaluation of PAI-related risks, of issuers' efforts to address these impacts, and of their future potential to operate in ways that do not significantly harm environmental and social objectives. Ultimately, the approach is designed to ensure that investments align with sustainability goals and mitigate adverse PAIs.

### 2.1.3.Examples of DNSH and PAI integration

To illustrate the aforementioned processes of DNSH and PAI integration, this section presents the example of environmental PAIs. Under SFDR, the PAIs 1 through 6 relate to environmental impacts. As explained, these PAIs are covered through Candriam's Business Activities Analysis, in particular with regards to the Key Sustainability Challenge of Climate Change, and through our Stakeholder Analysis, notably in the evaluation of how companies manage environmental matters. Further, we apply exclusions to avoid investments that inflict significant harm on environmental objectives. Below, we provide examples of the concrete workings of these analytical elements, as well as of the PAI monitoring process.

- **Business Activity Analysis - Key Sustainability Challenge Climate Change**

The impact of each corporate activity on the Key Sustainability Challenge of Climate Change, and hence its performance against PAIs 1 through 6, is analysed using a number of scientific bases, including internationally recognised assessments of the specific contribution of each sector to global GHG emissions and in-depth analysis from the International Energy Agency (IEA) on the level of progress of each sector relative to its decarbonisation pathway. This approach enables a comprehensive assessment of how issuers and sectors perform on emissions-related PAIs, and thus to grasp if they can potentially significantly harm environmental objectives.

For example, activities such as coal power generation, petroleum power generation, air transportation, or pesticide manufacturing, with high GHG intensities will result in a negative **Climate Change Score**. On the other hand, activities such as wind, solar, hydroelectric power generation and rail transportation,

are likely to yield a positive Climate Change Score. The table below illustrates the scale on which such activities are scored.

<b>Climate Change Score – Business Activity example</b>			
<b>Business Activity</b>	<b>Climate Change Score</b>	<b>PAI</b>	<b>Rationale</b>
<b>Coal power generation</b>	0	High GHG intensity	Coal and petroleum power are fossil fuel-based power sources, while renewable power is derived from natural resources.
<b>Petroleum power generation</b>	10	High GHG intensity	Coal is by far the most carbon intensive of fossil fuels. The production of electricity from coal is on average twice as carbon intensive as gas, and about 15 times more carbon intensive than renewables on a full lifecycle basis. Petroleum power is similar to coal power in terms of its impact on climate change.
<b>Wind/solar/hydroelectric power generation</b>	100	Low GHG intensity	Renewable energies are at the heart of the energy transition. To achieve the Paris goals and to align with a 1.5°C scenario, our economies need to rely on electricity for more than half of their energy requirements. This means that the share of renewables in total electricity generation needs to increase globally from 29% in 2020 to over 60% by 2030 and to nearly 90% by 2050.
<b>Air transportation</b>	20	High GHG intensity	Rail transportation is often considerably less carbon-intensive than air transportation because trains are often powered by electricity whereas airplanes rely on fossil fuels which is a major source of carbon emission.
<b>Rail transportation</b>	80	Low GHG intensity	According to the IEA, the average CO <sub>2</sub> emissions per passenger-kilometre for rail transportation are around 1/6 of those for air transportation (123 gCO <sub>2</sub> per passenger /km for aviation compared to 19 gCO <sub>2</sub> per passenger/km for rail)

**Example: Climate-related impacts in the automotive sector**

In the automotive sector, environmental challenges are closely tied to the industry's reliance on fossil fuels. The sector's indirect link to fossil fuels primarily stems from the internal combustion engines in vehicles, which still account for the majority of vehicles sales and are a major contributor to GHG emissions. Road transport alone accounts for nearly 20% of total global GHG emissions, underscoring the sector's substantial impact on climate change. Automakers that continue to rely on traditional fossil-fuel based technologies without transitioning toward electrification risk breaching the DNSH requirement due to their substantial contribution to climate change, air pollution and resource depletion.

- **Stakeholder Analysis – Stakeholder Environment**

Within the Stakeholder Analysis, the Environment pillar evaluates both process- and product-related environmental impacts, as well as a company's strategy for managing these impacts. It encompasses a broad range of environmental topics, including energy use and climate change, air emissions, water consumption and associated discharges, land use and biodiversity, and waste management. The matter of environmental management is a crucial one, especially in sectors with high impacts on the environment, as explained below.

***Example: DNSH and the environment in the airline sector***

In the transport sector, the type of transport - motorised and/or electrified – is the key determinant of adverse impacts on CO2 emissions and significant harm in terms of global warming, more so than a company's environmental strategy.

Accordingly, the Climate Change Score for the airline industry is very low (20/100) due to the negative contribution of this activity to Climate Change. Aviation is responsible for approximately 2.5% of global CO2 emissions and contributes to 4% of observed human-induced global emissions (including non-CO2 pollutants, such as nitrogen oxides and water vapor).

Given the airline industry's substantial carbon footprint and other climate externalities, it faces major challenges in aligning with DNSH criteria, particularly in relation to PAIs 1 through 4. In fact, most airline companies fail to meet the DNSH criteria.

As a result, almost no airline company is eligible to Candriam's sustainable investment universe. Only companies with exceptional environmental management (and consequently an outstanding Environment Score in the Stakeholder Analysis) can achieve a combined ESG Rating that allow for sustainable investment.

- **Combining the Climate Change Score and Environment Score and setting thresholds**

To further strengthen the integration of PAI 3 (GHG intensity) and build sustainable strategies that do no significant harm in this respect, we have implemented reinforced environmental requirements. This concerns in particular issuers that operate in sectors where environmental considerations are most material and that have a low Climate Change Score (<40) following the Business Activities Analysis, indicating that the issuer's activities have negative impacts on climate change due to high GHG emissions. Such issuers must demonstrate a good management of environmental issues, i.e. an Environment Score over 60 following the Stakeholder Analysis, in order to be considered Sustainable Investments.

Environmental management can be assessed based on the following criteria:

- **Ambition:** Does the company set interim goals to ensure adherence to the emissions reduction trajectory? Does it integrate lifecycle emissions targets that cover supply chain and product impact?
- **Decarbonisation strategy:** Is the company developing and integrating a clear roadmap with CAPEX breakdown for decarbonisation investment and a phase-out commitment for high-carbon assets?
- **Climate governance:** Does the company ensure top-level oversight and integrate performance incentives tied to achieving climate targets into executive remuneration?

In practice, this means that issuers in the most carbon-intensive sectors (for example, extraction and processing of fossil fuels, cement and steel producers, airlines and shipping etc.), which by nature have low Climate Change Scores, need to demonstrate exceptional management of environmental issues. Through exceptional management of environmental issues, a company can achieve a very high Environment score, making it eligible for Sustainable Investing.

***Example: DNSH and the interactions between PAIs in the banking sector***

Under the SFDR, the DNSH principle mandates that activities positively contributing to one sustainability objective must not cause significant harm to other objectives, including environmental ones. The banking sector is an interesting example of how PAIs, both environmental and social, can interact in the overall DNSH assessment. The sector faces a number of environmental challenges, including fossil fuel exposure, green activities, and environmental strategy, as well as several social challenges such as those related to digitalisation, human capital management and customers.

In the sector, PAI 4 (exposure to companies active in the fossil fuel sector) for example is being closely monitored through the lens of the DNSH principle. Extensive fossil fuel financing contributes to high greenhouse gas emissions (PAI 1: GHG intensity), which conflicts with climate change mitigation objectives. Additionally, the associated environmental degradation - such as air pollution (PAI 5: Air pollutant emissions) and negative public health effects in local communities - raises concerns under the pollution prevention and control criteria.

On the social side, banks are for example assessed on whether and how they provide services to underprivileged populations (e.g. microfinance), along with critical factors like cybersecurity and data privacy breaches.

These environmental and social adverse impacts have to be looked at concomitantly in an overall DNSH assessment. Thus, if a bank is actively financing social housing through specific lending activities, it may qualify as meeting our Social Contribution criteria. However, if the same bank has significant exposure to fossil fuels (based on the absolute amount of financing, the trend since the Paris Agreement, or its performance over the last three years relative to its balance sheet), this could offset its social contribution. In fact, such significant environmental externalities create material sustainability risks that outweigh the bank's positive social impact. Consequently, despite its contribution to social housing, high fossil fuel exposure prevents the bank from being classified as a Sustainable Investment.

• **Exclusions as a means to prevent significant harm to environmental PAIs**

For Sustainable Investments, we implement stringent environmental exclusions<sup>11</sup> on controversial activities that have significant climate-related adverse impacts. For instance, we exclude companies generating over 5% of revenue from coal-fired power or new thermal coal projects. Candriam also excludes companies with more than 5% of revenue from conventional or unconventional oil & gas activities and over 25% from oil & gas related activities such as supporting products/services, distribution, retail, petrochemicals and equipment's. These climate-related exclusions, particularly in high-carbon sectors such as energy and transportation, directly address key climate-related PAIs, particularly GHG emissions (PAI 1), carbon footprint (PAI 2), and exposure to fossil fuels (PAI 4). For example, within the MSCI World Index, we exclude nearly all companies in the energy sector<sup>12</sup>, representing approximately 4.70% of the index, due to their negative climate impact. Similarly, in the

<sup>11</sup> For Candriam's full Exclusion Policy please refer to: <https://www.candriam.com/en/professional/investment-solutions/sustainability-documents/#sustainability-policies-guidelines-commitments>

<sup>12</sup> The Energy sector accounts for 4.72% of the MSCI World Index

transportation sector<sup>13</sup>, exclusions are also substantial with 1.32% of companies excluded. This is especially evident in sub-sectors like airlines and airport services, which are almost entirely excluded due to their high GHG emissions. However, more environmentally friendly sub-sectors such as rail transportation are more likely to qualify for inclusion due to their lower environmental impact.

Additionally, Candriam's Sustainable Investments are compliant with the broader CTB (Climate Transition Benchmark) and PAB (Paris-Aligned Benchmark) criteria. This further strengthens the integration of the DNSH principle by excluding activities with significant climate impact, such as thermal coal, oil and gas extraction and high energy intensity.

#### • PAI monitoring process

The PAI monitoring process is overseen by Risk Management, which identifies issuers categorised as Sustainable Investments, but exhibiting high levels of PAI data (outliers). After this initial step, ESG Analysts review these companies, and, where necessary, include them in a dedicated engagement list. Examples of the benchmarks used for monitored environmental PAIs are provided below.

	Developed Issuers	High Yield (HY) or Emerging Market Issuers
<b>PAI 02 – Carbon Footprint (Scope 1,2)</b>		
<b>PAI 03 - GHG Intensity of investee companies (Scope 1,2)</b>	PAI data higher than the 97.5 <sup>th</sup> percentiles of Benchmarks	PAI data higher than the 97.5 <sup>th</sup> percentiles of Benchmarks
<b>PAI 06 - Energy consumption intensity per high impact climate sector</b>	- iBoxx Euro Corporate - MSCI EMU - MSCI Japan - MSCI United States - MSCI World	- ML Euro HY BB-B Non-Fin - ML Global HY BB-B 2% Constraint Non-Financial - MSCI Emerging Markets
<b>PAI 08 – Emissions to water</b>		
<b>PAI 09 - Hazardous and radioactive waste ratio</b>		
<b>PAI 15 - GHG intensity of sovereigns</b>	PAI data higher than the 97.5 <sup>th</sup> percentiles of Benchmarks  - JPM GBI EMU - JPM GBI Global	PAI data higher than the 97.5 <sup>th</sup> percentiles of Benchmarks  - JPM EMBI Global Diversified

<sup>13</sup> The transport sector accounts for 1.82% of the MSCI World Index

## 2.2. Sovereign issuers

PAIs are integrated into Candriam's sovereign sustainability framework, through the in-depth negative screening and through the analysis of sustainable development criteria: Human Capital, Natural Capital, Social Capital and Economic Capital.

Please find below an overview of the means by which PAIs are considered in the case of investments in sovereign issuers:

CANDRIAM SOVEREIGN SUSTAINABILITY FRAMEWORK							
	Sustainable Development Criteria				In-depth Negative Screening <sup>1</sup>		
	Natural Capital	Human Capital	Social Capital	Economical Capital	Candriam's Oppressive Regimes List	Financial Action Task Force Call for Action List	Freedom House's Freedom in the World Index
Indicators applicable to investments in sovereigns & supranationals							
Climate and other environmental-related indicators							
PAI 15. GHG intensity	X						
Social and employee, respect for human rights, anti-corruption, and anti-bribery matters							
PAI 16. Investee countries subject to social violations		X	X		X		X
Optional Indicators applicable to investments in sovereigns & supranationals							
Social and employee, respect for human rights, anti-corruption, and anti-bribery matters							
PAI 18. Average income inequality score			X				
PAI 19. Average freedom of expression score			X		X		X
PAI 20. Average human rights performance			X		X		X
PAI 21. Average corruption score			X				
PAI 22. Non – cooperative tax jurisdictions				X			
PAI 23. Average political stability score			X				
PAI 24. Average rule of law score			X		X		X

<sup>1</sup> Discretion is applied to countries that are violators of international agreements or are likely to experience a material deterioration of their sustainability status, but such violations or deterioration are not yet reflected in the available data.

### 2.2.1. Consideration of PAIs in ESG research and analysis

Candriam has defined three complementary steps for integrating PAIs into its ESG research and analysis for sovereign issuers. These steps are outlined below:

#### 2.2.1.1. Negative screening

Candriam's negative screening for sovereign issuers is applied through two analyses: Oppressive regimes and a normative filter. These analytical steps constitute Candriam's assessment of minimum safeguards under SFDR for sovereign issuers, ensuring compliance with international human rights treaties. Furthermore, in line with the DNSH principles, this process excludes sovereigns that violate these safeguards or harm environmental and social sustainability.

- **Oppressive regimes:** The first step of Candriam's negative ESG screening is to exclude<sup>14</sup> countries that are regarded as oppressive regimes, i.e. countries that display the following characteristics:
  - Severe violations of Human Rights on a regular basis;
  - Systemic ethical breaches;
  - Systematically denial of fundamental liberties, such as freedom of speech and political participation;
  - Governmental failure or abuse compromising the security of citizens;
  - Totalitarian regimes and nations where the government is involved in war or armed conflict against its own population.

Through this filter we implement PAI 16.

- **Norms-based analysis:** We exclude countries flagged as follows:
  - Financial Action Task Force Call for Action List – state sponsors of terrorism;
  - Freedom House's Freedom in the World Index – states that are considered Not Free.

In addition, discretion is applied to countries that are violators of international agreements or are likely to experience a material deterioration of their sustainability status, but such violations or deterioration are not yet reflected in the available data.

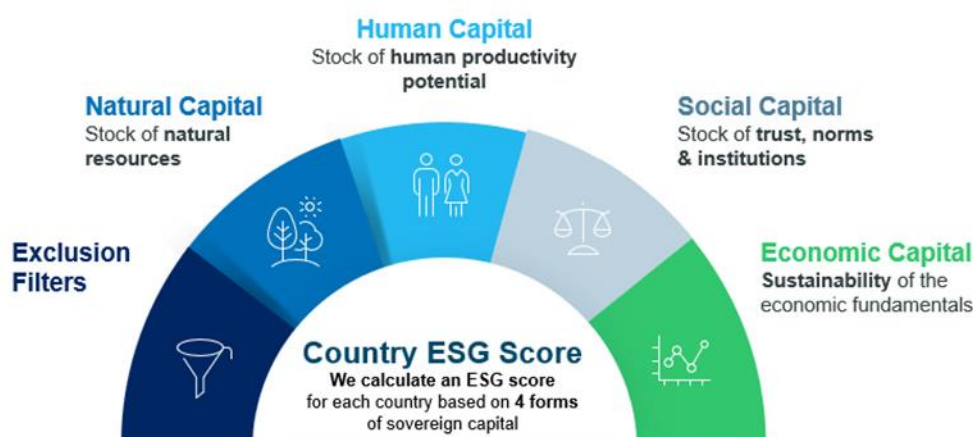
### 2.2.1.2. Proprietary ESG analysis (Sustainable development criteria)

We recognise that a country is more complex than a company, so our approach takes a broad view of the various factors influencing a country's development. Our framework considers over 500 factors, evaluating their relevance for each country at every stage of development over the past 10 years. It identifies key performance indicators (KPIs) for each issue and constructs scores, giving more weight to areas that matter most depending on each country's development level.

Candriam's ESG sovereign analysis provides a comprehensive assessment of countries through four key pillars: Natural Capital, Human Capital, Social Capital, and Economic Capital. These four capital domains incorporate a wide range of material ESG criteria which we evaluate using KPIs, as defined by the framework. Our materiality assessment is performed at every level in the framework, ensuring that a country score properly reflects what is important for the future development of that particular country. Every country has the same Factors, Issues and Components that comprise its score, but the importance that our materiality assessment process assigns them at every level of analysis is specific for each country and each point in time. This generates a dynamic capital-based analytical tree, which

<sup>14</sup> For a detailed description of Candriam's SRI exclusion policy, please refer to the following link: <https://www.candriam.com/siteassets/medias/publications/brochure/corporate-brochures-and-reports/exclusion-policy/candriam-exclusion-policy-en.pdf>

covers the sustainable development challenges and opportunities faced by each nation. Please find below an overview of the sovereign framework:

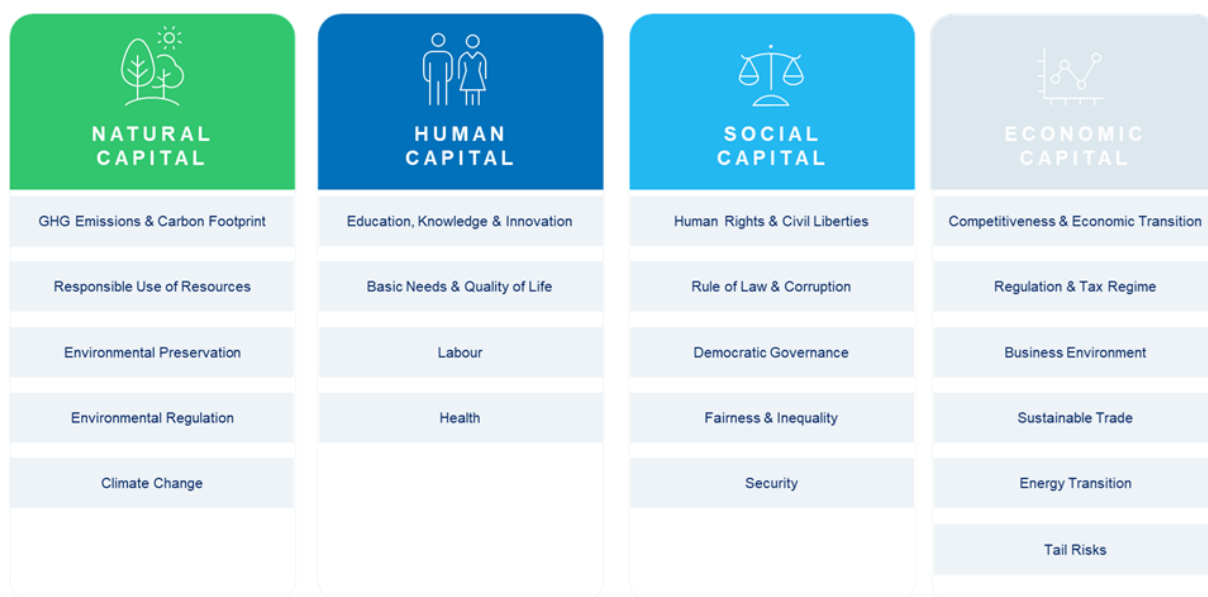


For example, in Candriam's Natural Capital pillar, **we address GHG intensity (PAI 15)** through our GHG Emissions and Carbon Footprint component that together account for emission trends, covering domestic emissions from both the public and private sectors, as well as various types of fossil fuels, particularly oil and coal. We use a proprietary emissions model that traces carbon emissions by industry and fuel type, addressing the limitations of standard carbon intensity measures. This model integrates a country's emissions reduction efforts by sector, assigning penalties based on decarbonisation difficulty and evaluating the efficiency of renewable energy use. Continued reliance on coal, when cheaper renewables are available, incurs the highest penalties, followed by oil and gas. The model adjusts the overall carbon intensity based on decarbonisation efforts and fuel types, enabling a more accurate assessment of progress. Through the imposition of penalties based on sector-specific decarbonisation challenges and fuel selections, Candriam's framework incentivises countries to transition to more sustainable practices and meet their decarbonisation targets.

Next to the component of GHG Emissions and Carbon Footprint, we have defined four other components to measure a country's performance on Natural Capital namely Environmental Regulations, Climate Change metrics, Environmental Preservation metrics and Responsible Use of Resources (PAI 16).

In Candriam's Social Capital pillar, we address the civil society and state institutions of each nation, including transparency and democracy, government effectiveness, corruption (PAI 21), inequalities and populations' level of security through key five components: Human rights and civil liberties, Rule of Law and Corruption metrics (PAI 24), Democratic Governance scores, Fairness and Inequality factors and Security metrics.

Please refer to the below for more information on the material ESG factors and KPIs within the four capital domains, as defined by the framework.



Our sustainability framework emphasises on the Natural Capital criteria by turning it into a multiplier for the other three capitals. Doing so, we create three environmentally efficient capitals in order to reflect the urgency of dealing with the environmental challenges ahead of us. The overall sustainability score of a country is the average of the three environmentally efficient capitals, calculated in such a way, projected five years forward. This forward projection takes into account any improvement or deterioration that is observable in a country, as opposed to relying only on the status quo at the time of assessment. As a result of this approach, it will be much harder for a country to compensate for environmental damage by creating another form of capital, as all capital scores will be evaluated through the environmental damage that was done in the creation of well-being in the form of Human, Social, or Economic capitals. Environmental preservation takes centre stage in our framework, and this is necessary in order to recognise the most significant challenge that faces humankind.

The resulting Capital pillar scores are turned into environmentally efficient Capital scores, as described above, and then countries are ranked according to the arithmetic average of the three environmentally efficient Capitals - the overall Sustainability Score.

A supranational issuer can be deemed sustainable if its mission contribute positively to sustainable development, and if it has not committed any major systematic breaches of the Principles of the United Nations Global Compact (UNGC), according to our Norms-based Analysis.

For more information, please refer to our SFDR Sustainable Investment Definition, available via: <https://www.candriam.com/en-fr/professional/sfdr/#definitions-and-methodologies>

### 2.2.1.3. Stewardship (dialogue)

Candriam's engagement activities are an important tool in our efforts to reduce the extent of PAIs. For sovereign PAIs, particularly those with potential risks related to PAI 15, we preferably engage with governments through global initiatives, such as the Global Investor Statement to Governments on the

Climate Crisis or the Investor Policy Dialogue on deforestation and the UNPRI Collaborative Sovereign Engagement working group on Climate Change. While statements are typically sent to state representatives in advance of key events like the G7, G20, or annual UN COP Climate conferences, collaborative dialogues take place over a longer period of time, involving various stakeholders on top of government representatives.

Since 2021, Candriam has actually intensified its sovereign engagement efforts by taking an active role in these collaborative dialogues. We are also progressively engaging in an individual way with sovereigns on very specific topics sometimes linked to PAIs, such as tax-related engagement with countries considered as non cooperative.

More information is available in our annual engagement review and in our Engagement policy.

### **2.2.2. Monitoring of PAIs (high PAI data)**

As outlined in section 1, Candriam's PAI monitoring process, focuses on those issuers that are considered outliers due to high PAI data. This process includes identifying, evaluating, and following-up on those particularly high PAIs.

In the context of sovereign issuers, the monitoring process is particularly complex, given the broader, macroeconomic, environmental, and social factors that influence the sustainability profile of a country. For example, a country may exhibit high carbon emissions due to its energy mix but might simultaneously commit to international climate agreements (such as the Paris Agreement), and a clear strategy to transition to cleaner energy sources. In such a case, the country's inclusion within the investment universe may still be justified, provided that a well-defined and credible plan for mitigating these adverse impacts is in place and that progress is being actively monitored.



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