ESG Integration @ Candriam

Table of contents

- 1. Introduction
- 2. Sustainability @ Candriam
- 3. ESG assessment
 - a. Candriam's proprietary corporate ESG analytical framework
 - b. Candriam's proprietary sovereign ESG analytical framework
 - c. Candriam's ESG approach for supranational organisations and agencies
 - d. Scenario analysis

4. ESG integration @ Candriam

- a. Incorporation of ESG assessments into investment decisions: Scopes of application
- b. Approach to ESG integration @ Candriam
- c. ESG integration for equity strategies
- d. ESG integration for quantitative equity and index strategies
- e. ESG integration for Fixed Income strategies
- 5. Governance

1. Introduction

In the face of the environmental and social challenges our world faces today, there is a clear need for smarter, more sustainable and inclusive socio-economic development that strengthens the resilience of the global economy. In fact, economic growth should be sustainable over the long term, benefiting everyone across generations.

In 2015, both the COP21 Paris Agreement and the United Nations Sustainable Development Goals (UN SDGs) clearly articulated this need, highlighting the importance of shifting the emphasis from measuring economic growth per se to appraising and incentivizing sustainable economic development for all.

By steering capital to sustainable economic activities, we need to dissociate economic growth from many of the environmental and social imbalances it currently generates in order to create a resilient socio-economic environment.

Financial markets in general, and investors in particular, are key to financing economic development. In fact, financial markets play a pivotal role in the financing of companies' activities to support economic growth and foster innovation. They are also an important source of debt finance for sovereign issuers.

Therefore, an essential question for investors is: What type of economic development would they like to support through their financing activities, and how can they support its sustainability? For instance, are we seeking growth fuelled by coal-fired power plants that pollute heavily, impact climate change and public health, risk being stranded and put invested capital at risk? Or are we looking for economic development powered by wind farms, innovation in green hydrogen and sustainable food solutions that may offer attractive risk-adjusted returns in the long run? Thus, as society is changing, investors today are being challenged on their capital allocation and the types of issuers they finance.

2. Sustainability @ Candriam

It is essential for the international investment community to take a broad, holistic view on the interplay between economic development and the opportunities and risks stemming from sustainability, and to fully appreciate the socio-economic value of considering and integrating sustainability in investments.

Candriam, whose name is an acronym that stands for Conviction and Responsibility in Asset Management, is fully committed to contributing to that mission, to the sustainability objectives of the Paris Agreement and to the United Nations Sustainable Development Goals. Our name articulates a clear message to our clients, the investment community and society. As an active and responsible asset manager, we consider that the explicit and systematic integration of environmental, social and governance (ESG) issues is a necessary and central part of sustainable investment strategies across all asset classes in order to create sustainable long term value for our clients.

In fact, Candriam has been at the forefront of sustainable investing ever since launching its first responsible fund back in 1996, delivering financial performance on the back of deeply rooted sustainability convictions for over two decades. We offer a broad range of sustainable investment strategies spanning equity and fixed income, corporate and sovereign instruments, both in the active as well as passive space.

Candriam's dedicated ESG Research & Investments Department provides in-depth evaluations of corporate and sovereign issuers' sustainability, as well as sector-specific ESG analysis and fundamental research related to sustainability issues. In addition, being integrated within the ESG Research & Investments Department and working in close collaboration with the ESG sector analysts, the engagement and voting team carries out carefully coordinated, impactful engagement and voting campaigns.

These results of our sustainability assessments are powerful levers for more informed portfolio decision-making, valuation and credit analysis across Candriam's investment activities. They are integrated according to a multi-layered approach.

Candriam's proprietary framework for the assessment of the sustainability of issuers and the processes for integrating these assessments into investment strategies are described in the sections that follow.

3. ESG assessment

In-depth assessment of issuers' sustainability and its materiality for financial returns is the cornerstone of sustainability at Candriam and the foundation for integrating sustainability into our investments.

Through its over 25 years of experience in investing with ESG considerations, Candriam has developed proprietary ESG analytical frameworks. Candriam's proprietary corporate ESG analytical framework evaluates the sustainability of corporate issuers of equities and bonds, including covered bonds. The sustainability of countries is assessed through Candriam's proprietary sovereign ESG analytical framework. Further, Candriam has developed an ESG approach for evaluating supranational organisations and agencies.

A key characteristic of our ESG analytical frameworks is that they have been built to be comprenhensive and forward-looking. In addition to assessing present and short-term sustainability-related risks and opportunities, they aim at integrating a long-term perspective of how sustainability impacts socioeconomic development. This is achieved through several means:

- First, our analysis involves the identification of structural ESG trends i.e. Candriam's "Key Sustainability Challenges – KSCs" such as overexplotation of resources and climate change, in the corporate ESG framework and an assessment of how issuers are positively and/or negatively exposed to these challenges.
- Secondly, Candriam's analytical frameworks integrate the double materiality principle for assessing corporate and sovereign issuers. This means that,
 - On the one hand, Candriam evaluates and integrates the particular materiality of environmental and social issues and ESG trends and how the risks and opportunities stemming from those trends could negatively respectively positively impact corporate and sovereign issuers in the short and long run, and as a consequence financial returns for investors.
 - On the other hand, Candriam analytical ESG framework assesses how its exposure to issuers could adversely impact the environment and society.

As a result, Candriam's ESG models reflect its view of the specific likelihood of trends impacting the sustainability of sectors and/or countries.

• Lastly, we seek to identify and use future-forward indicators and data points from a multitude of sources in our ESG analysis, including the information retrieved from our stewardship activities.

These analytical frameworks are described in detail in the sections that follow.

•

a. Candriam's proprietary corporate ESG analytical framework

Candriam's proprietary corporate ESG analytical framework enables us to conduct in-depth research into the sustainability of corporates. The outputs of this analysis are used to inform investment decisions pertaining to equities as well as corporate fixed income, including covered bonds.

This analysis is carried out by Candriam's corporate ESG Analysts. They closely collaborate with Candriam's Engagement & Voting Analysts, whose insights, garned through dialogue with issuers and voting campaigns, also serve to enrich the evaluation of companies.

The framework is structured around the following pillars:

I. Proprietary ESG analysis, composed of:

- i. Business activity analysis
- ii. Stakeholder analysis

II. <u>In-depth negative screening</u>, composed of:

- i. Controversial activities analysis
- ii. Norms-based assessment

Each of these pillars is described in detail below.

I. Proprietary ESG analysis

Candriam has developed a structured and consistent approach enabling the assessment of risks and opportunities that stem from the business activities and operations of companies. This process identifies and analyses sustainability-related risks and opportunities, and companies' contributions to sustainability objectives from two distinct but interlinked angles: Business Activities and Stakeholder Management. Both analyses are designed to assess companies' ability to contribute to sustainability objectives now and in the future and to identify those companies whose activities or stakeholder management could cause harm to environmental and/or social objectives over the short and long term.

ESG trends and challenges, like global warming and the depletion of natural resources, test the resilience of financial and economic systems and of the companies that operate in them. At the same time, they also offer opportunities to foster innovation by investing in companies that create solutions to alleviate or solve these challenges. This goes beyond environmental matters and includes the social and governance dimension of corporate behavior. This wholistic consideration of ESG factors reflects our conviction that specific environmental, social and governance issues are being and/or will be priced by financial markets participants due to policy, technological and/or societal change.

i. Business Activity analysis

Candriam's business activities analysis assesses the extent to which a company's products and services are exposed to and contribute, positively or negatively to key ESG trends – that is Candriam's "Key Sustainability Challenges (KSCs)".

Five KSCs have been defined based on the research conducted by Candriam's ESG Investments & Research Department into ESG trends most likely to impact corporates: Climate Change, Resource Depletion, Demographic Shifts, Health & Wellness and Digitalization. These challenges are long-term trends that considerably influence the socioeconomic environment in which companies operate as they drive consumer behaviour, regulatory policy and the economic landscape. Thus, they shape the current and future challenges in the market as well as the long-term growth opportunities. Importantly, while the KSCs are long-term structural trends, they have impacts over different time horizons. For example, as a result of Climate Change and the ensuing imperative of the energy transition, certain assets are at high risk of becoming stranded in the near future. Innovations in the area of recycling and telecommuncations are already taking advantage of their exposure to the Resource Depletion and Digitilization KSCs. Other impacts can be more long-term, for example those related to companies' ability to position themselves for a global demography that will look very different in the future than today.

The analytical framework integrates the notion of double materiality – meaning that different KSCs have different levels of relevance for different sectors and business activities. Accordingly, Candriam's sector models define the materiality of each KSC for each sector.

This analysis results in qualitative and quantitative information on companies, and each company receives a Business Activity Score. These outputs are used in ESG integration, which is described later in this document in section 4.

ii. Stakeholder Analysis

Candriam's Stakeholder Analysis evaluates a company's ability to sustainably incorporate stakeholder interests into its long-term strategy, and its potential positive or negative short- and long-term impacts on its stakeholders. A company's interactions with its stakeholders also give rise to opportunities and risks for the company, and are therefore key determinants of long-term value creation or risk exposure. There are six key stakeholders: the Environment, Society, Employees, Suppliers, Clients and Investors. The Stakeholder Analysis examines a company's interactions with its stakeholders and assesses the quality of management of these interactions.

The framework includes an in-depth analysis of the materiality of each stakeholder for each sector, as different stakeholders will be more or less pivotal for different sectors.

The outputs of the stakeholder analysis are qualitative and quantitative insights into companies' sustainability, as well as a Stakeholder Score for each company. These outputs are used in ESG integration, which is described later in this document in section 4.

As a result of Candriam's ESG analysis, each issuer is assigned a Business Activity Score and a Stakeholder Score. Together, these Scores determine an overall ESG Rating from ESG 1, best ESG Rating, to ESG 10, worst ESG Rating and an overall ESG Score from 0 to 100 for each issuer. The results of the analysis are incorporated into investment decision-making through the ESG integration processes described later in this document in section 4.

Together, Candriam's Business Activity Analysis and Stakeholder Analysis allow for a comprehensive coverage of E, S, and G factors across all sectors and industries applying the double materiality principle:

- **Environmental** considerations undergo a comprehensive evaluation through:
 - Business Activities Analysis, notably via the following KSCs:
 - Climate Change (e.g., level of GHG emissions, level of progress on decarbonisation pathway)
 - Resource Depletion (e.g., impact on availability or scarcity of resources in our ecosystem)
 - Digitalization (e.g., digitalization of processes that delivers clear benefits to the environment)
 - Stakeholder Analysis, notably via:
 - Environment (e.g., environmental policy, including GHG reduction programme, land use and biodiversity, disposal and recycling)
- Social considerations are evaluated through:
 - Business Activities Analysis, for instance through the following KSCs:
 - Health & Wellness (e.g., ensuring healthy lives and promoting well-being for all at all ages)
 - Digitalization (e.g., digitalization of processes that delivers clear benefits to society and the economy)
 - Demographic Evolution (e.g., aging population and other changing trends in global human population including specific sub-groups (young, elderly population, etc) across various locations (countries, regions, urban rural, etc).
 - Stakeholder Analysis, via:
 - Employees (e.g., recruitment & retention, working conditions, staff relations)

- Customers (e.g., commercial practices, quality & safety assurance, community relations)
- Suppliers (e.g., practices of suppliers)

With regards to social considerations, the Business Activity and Stakeholder Analyses also allow us to evaluate the extent of a company's exposure to Human Rights risks and its capability in preventing, addressing, mitigating and remedying Human Rights impacts arising from its business operations. Please find below a few examples of analytical focal points pertaining to Human Rights:

- Human capital management (labour structure, location of operations, employee turnover rates)
- Controversial raw materials (policy management and commitment on sourcing materials, responsible sourcing mechanisms, transparent reporting on findings or flagged issues)
- Customer-related matters (product quality & safety, data privacy & security)
- Corporate governance (board commitment, oversight and monitoring on Human Rights, code of conduct, human rights policy, modern slavery statement, etc.)
- **Governance** considerations are assessed through the:
 - Stakeholder analysis, via:
 - Investors (e.g., board structure, auditors' rotation, remuneration, share capital, etc.)

II. In-depth negative screening

Candriam conducts in-depth analysis into corporate issuers' alignment with international norms and conventions and examines involvement in controversial activities. This screening is an important component in the identification and reduction of sustainability-related risks and the adverse impacts and damage companies may inflict on environmental and/or social issues.

i. Controversial activities analysis

Candriam's in-depth analysis of controversial activities allows for the identification of companies that carry out activities that we believe have a substantial negative impact and carry serious risks from both a financial and a sustainability perspective. In fact, exposure to these activities presents important systemic and reputational risks for the investee companies from an economic as well as environmental and social point of view.

ii. Norms-based assessment

Candriam conducts in-depth research into corporates' compliance with international norms and standards. For example, we identify issuers that breach any of the ten principles of the United Nations Global Compact or the guidelines for multinational enterprises defined by the OECD. Accordingly, this analysis covers the following areas: Human Rights, Labour Rights, Environment and Anti-Corruption.

b. Candriam's proprietary sovereign sustainability analytical framework

Candriam's proprietary sovereign sustainability analytical framework has been built to provide in-depth assessments of the sustainability of countries, which in turn can affect their ability and willingness to make good on their debt. Importantly, the sovereign sustainability model is forward-looking: It examines the upward or downward trends in countries' ESG performance and incorporates indicators focused on the likely direction of travel of countries' sustainability going forward. Further, the model is materiality-based, meaning that it assesses the relative importance of each ESG trend, theme and indicator for the current and future sustainability of different countries.

Candriam's sovereign sustainability framework is structured around the following pillars:

- I. Sustainable development criteria
- II. In-depth negative screening

These pillars are described in detail below.

I. <u>Sustainable development criteria: Human Capital, Natural Capital, Social Capital and Economic Capital</u>

The ability of countries to develop sustainably, and the resulting risks and opportunities are assessed across the four pillars of sovereign capital: - Human Capital, Natural Capital, Social Capital and Economic Capital.

These four capital domains incorporate a wide range of material ESG factors which we evaluate using Candriam's internally defined themes, issues and indicators. This generates a dynamic capital-based analytical tree, which covers the sustainable development challenges and opportunities faced by each nation.

- Natural Capital: Assesses how a country conserves and sustainably employs its natural resources. We evaluate how a country manages its interactions with global environmental trends and challenges such as climate change, consumption of resources, stewardship of biodiversity, and waste handling.
- Human Capital: Assesses economic and creative productivity, by evaluating education and skill levels, innovation, health, labour participation rates and employment ratios, among other sustainability themes. Long-term sustainability trends and their impacts are also taken into consideration, such as changes in the labour market structure.
- **Social Capital**: Evaluates civil society and state institutions, including transparency and democracy, government effectiveness, corruption, inequalities, and the populations' level of security. We monitor both short-term (i.e. election outcomes, political unrest ...) and long-term (i.e. growing inequality) matters, and form a comprehensive view of the overall sustainability path of a country.
- **Economic Capital**: Assesses a country's economic fundamentals, in order to measure each government's ability to finance and support sustainable policies over the long run. We monitor, among others, regulation and tax policies, the short and long term exposure to risks and opportunities that stem from the transition to a Net-Zero Carbon economy and the overall business environment of a country.

Our sovereign ESG analytical framework reflects the urgency of dealing with the environmental challenges ahead of us that our world faces, as well as the fact that Natural Capital is finite and cannot be replaced by other forms of capital. Therefore, the Human, Social and Economic Capital scores of a country are each multiplied by the country's Natural Capital score. Thus, we obtain environmentally weighted Human, Social And Economic Capital scores, which reflect how environmentally-efficient a country is in developing its sovereign capital.

II. In-depth negative screening

An in-depth negative screening is performed in order to identify high-risk regimes and check for minimum standards of democracy, using the following criteria:

- Freedom House's Freedom in the World Index states that are considered 'Not Free'
- Highly Oppressive Regimes severe human and political rights violators
- Financial Action Task Force's Call for Action List state sponsors of terrorism
- Countries that are violators of international agreements

Based on the two pillars described above, Candriam's sovereign ESG analytical framework allows for an in-depth analysis of E, S, and G factors:

- Environmental considerations undergo a comprehensive evaluation through the analysis of:
 - Natural capital, which evaluates how a country positively or negatively contributes to global environmental challenges. Themes examined incude climate change, resource management, stewardship of biodiversity, and waste handling.
 - Economic capital, which assesses how a country manages its transition to a Net Zero Carbon economy and trade sustainability, that is the carbon intensity of trade flows.
- **Social** considerations are evaluated through the analysis of:
 - Human capital, which examines for example education and skill levels, innovation, health, labour participation rates and employment ratios, among other sustainability themes. Labour rights, such as decent working conditions, absence of forced, child and slave labour, as well as the prevalence of discriminatory labour practices are monitored within Human Capital.
 - Social capital, which evaluates civil society and state institutions of each nation, including transparency and democracy, government effectiveness, corruption, inequalities and populations' level of security. Freedom of Expression and Belief, Freedom of the Press, Freedom of Opinion and Expression, Human Rights & Civil Liberties, Associational and Organizational Rights, Freedom of Assembly, Freedom of Association and Collective Bargaining, Personal Autonomy and Individual Rights, Land, Property and Housing Rights, Right to Privacy, Security Forces and Human Rights, Torture and other Ill-Treatment, Minority Rights, Sexual Minorities, Women's and Girls' Rights are all metrics that are are considered in the the Social Capital analysis and are pertinent to broad adherence to Human Rights norms on the part of investee countries.
- Governance considerations are assessed through the examination of:
 - o Economic capital, which measures each government's ability to finance and support sustainable policies over the long run.

c. Candriam's ESG approach for supranational organisations and agencies

Candriam assesses supranational organisations and agencies through a mission statement analysis and a norms-based analysis.

The purpose of the mission statement analysis is to identify supranational organisations and agencies whose mission contributes in a positive way to the economic and social development of regions and countries. This qualitative analysis is carried out by Candriam's ESG Analysts and considers different regional and country-specific challenges and opportunities. Where agencies are indirectly covered by sovereign issuers, their eligibility is also dependent on the ESG quality of the country in question.

Candriam also performs a norms-based analysis of supranational issuers and, when relevant and material, agencies. The purpose of this analysis is to determine whether or not a supranational organisation observes the ten principles of the United Nations Global Compact in four key domains: Human Rights Labour, Environment and Anti-Corruption. This analysis aims at identifying supranational organisations that significantly and repeatedly fail to observe these principles.

d. Scenario analysis

1. General ESG scenario analysis at Candriam level

Candriam's Group Strategic Committee (GSC) regularly assesses the sustainability challenges and trends that the company is exposed to, in order to determine how Candriam should manage its stakeholder relations and how it should attune its business model and asset management practices to these long-term challenges and opportunities.

Candriam's Sustainability Risk Committee (SRC), reporting directly to the GSC, specifically assesses sovereign and corporate reputational and financial risks related to sustainability, including climate risks, and defines a company-wide corporate and sovereign issuer watch list. To this end, scenario analyses are carried out to assess risks and apply strategies and policies to reduce them.

Based on the temperature scenarios of the Paris Agreements, Candriam joined the Net Zero Asset Managers Initiative (NZAMI) in November 2021. In addition, 2021 was a landmark year for our climate strategy, as we set the objective of becoming net zero across our activities by 2050, in line with the Paris goals.

We continuously test the compatibility of companies and business activities with long-term sustainability and with the transition towards a more sustainable economy, notably in high-stakes sectors such as oil & gas and energy. We have set particularly rigorous expectations for these sectors and in the past have generally only included a very limited number of companies, as a result of our strict ESG ratings framework. As a result of this approach and after a long and thorough vetting process, often including direct dialogue, we can deem certain companies incompatible with our best scenario analysis and the high standards of sustainability we set for Candriam's sustainable portfolios.

2. ESG scenario analysis in Candriam's ESG corporate analytical framework

Scenario analysis is also fully integrated into our corporate ESG analytical framework, described in section 3.a. The manner in which such scenario analyses inform the two pillars of the framework - Business Activities Analysis and Stakeholder Analysis – is described below.

Business Activities Analysis

This analysis evaluates a company's exposure (via its services/products, production areas, market segments, etc.) to Key Sustainability Challenges (KSCs). These challenges are long-term trends likely to considerably influence the economic environment in which companies operate and to determine the future challenges in the market as well as the long-term growth opportunities. Using scenario analysis, Candriam has identified five major challenges:

Climate Change:

Failing to limit temperature rises will result in increasingly frequent acute and chronic physical consequences of climate change. In this context, economic activities are confronted with different climate scenarios based on their contribution, positive or negative, to climate mitigation and adaptation.

Resource Depletion:

Many different drivers create pressure on ecosystems, as identified by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). The Resource Depletion KSC assesses the extent to which companies' activities contribute positively or negatively to the availability or scarcity of resources in our ecosystem based on their dependency on the availability of resources in our ecosystem; and/or the harmful impacts on biodiversity. It considers every single aspect of companies' impact on ecosystems and the main risks and opportunities linked to the Resource Depletion trend to assess how each company fits into the biodiversity loss scenarios.

Demographic Evolution:

The world's population is growing and is expected to reach nine billion people by 2050. More than two-thirds of the world's population will live in urban areas and, an increase in the share of elderly people in the worldwide population is expected.

Considering these major demographic trends shaping our world, to build a sustainable future we must tackle social justice and support companies that help alleviate social inequality.

The Demographic Evolution KSC aims to assess how companies contribute to the challenges and opportunities triggered by changes in the overall human population including specific sub-groups

(young, elderly population, etc) across various locations (countries, regions, urban rural, etc) and to the different social inequality scenarios induced by it.

Health and Wellness:

Health is defined by a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (World Health Organisation). We leverage the Global Burden of Disease to inform our scoring of this KSC. It analyses three main categories of risks: environmental, behavioural and metabolic risks which contribute to the disability-adjusted life years. The latter calculates the sum of the years of life lost to due to premature mortality (YLLs) and the years lived with a disability (YLDs) due to prevalent cases of the disease or health condition in a population. Thus, this KSC analyses how each company is aligned with the disability-adjusted life years scenarios.

Digitalisation:

Digitalisation is a concrete answer to the fourth Industrial Revolution. This KSC encompasses the infrastructure of the ICT sector, composed of internet networks, electronic equipment and related sustainable applications. Related sustainable applications include smart cities, tele-healthcare, education access via internet and mobile banking services, as well as cyber-security, a necessity to protect customers' data but also to maintain secure management of connected devices.

Through this KSC, we focus especially on the digitalisation delivering clear social and economic benefits based on risk scenarios induced it.

Stakeholder Analysis

Candriam's Stakeholder Analysis evaluates a company's ability to incorporate stakeholder interests in its long-term strategy, insofar as they are a source of risks and opportunities for the company. The six categories of stakeholders include Investors, Employees, Customers, Suppliers, Society, and the Environment.

We determine the relevance of each stakeholder for a sector based on qualitative and quantitative data, determine weights for each category and associate the quality of companies' stakeholder management with different ESG performance scenarios. Our analysis of stakeholder management is forward-looking, considering management trends and their alignment with our best standards.

For instance, we may look at the degree of attention paid to investors; the frequency of certain events such as accidents and fines; the tangible or intangible financial impact of ESG issues, and the outlook and prospects for a company to improve or deteriorate in these measures.

3. ESG scenario analysis in Candriam's ESG sovereign analytical framework

Candriam's sovereign ESG analysis, described in section 3.b, assesses across our four categories of sustainable development criteria: *Human Capital, Natural Capital, Social Capital* and *Economic Capital*. The framework emphasizes Natural Capital, by turning it into a multiplier for the other three capitals. In 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. As a result, it is 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 Human, Social, or Economic Capital.

These four capital domains incorporate a wide range of more than 480 ESG factors which we evaluate using our internally defined Key Performance Indicators, or KPIs. Candriam establishes a performance score for each factor, incorporating their materiality for the sustainable development challenges and opportunities faced by each specific country. A positive or negative change in an indicator will translate into an improvement or deterioration in the country's development scenarios and a relative increase in the weight of the indicator in question which will become more material. The model is dynamic and focuses on a forward-looking approach.

We always try to base our analyses on reliable independent data from a variety of sources, in order to get a comprehensive picture of each issue. However, information warfare has gradually penetrated a wide variety of media channels. To guard against this, Candriam also incorporates wherever possible, a independent, science-based data from various providers. For example, satellite imagery data of forests can be used to check deforestation statistics and claims.

Finally, our macroeconomic scenario analyses also impact the materiality of ESG indicators, independently of the sustainable development challenges and opportunities faced by each nation. We are constantly seeking to further develop our framework to ensure that our findings accurately reflect the evolving complexity and risks of the global economy.

4. ESG integration

a. Incorporation of ESG assessments into investment decisions: Scopes of application

The results of the ESG assessments described above are incorporated into investment decisions in different ways, depending on the investment strategies. Below we detail three scopes of application and the respective channels through which ESG assessments are incorporated.

Company-wide exclusions

Candriam incorporates the results of the corporate and sovereign ESG analytical frameworks through a set of **exclusions that apply to all investments made by Candriam** via long positions in direct lines in corporate and sovereign issuers and single-name derivatives¹.

For corporate issuers, these exclusions are the result of our controversial activities analysis and our norms-based analysis. Using specific thresholds, we exclude harmful activities that we believe have a substantial negative impact and carry serious risks from both a financial and a sustainability perspective. Exposure to these activities presents important systemic and reputational risks from an economic as well as environmental and social perspective. For example, Candriam excludes controversial armament, tobacco and thermal coal activities from all its directly managed portfolios. These activities are not compatible with sustainability as they compromise public health, the environment and/or life. In addition, for investors, these activities can have an adverse financial impact on invested capital as both regulatory and societal expectations are changing.

Similarly, Candriam excludes issuers that are embroiled in the most severe violations of the United Nations Global Compact principles. As a company's response to a crisis is a key aspect of the evaluation, dialogue with the company often is an important aspect of the assessment of these violations.

For sovereign issuers and quasi-sovereign entities, exclusions are applied based on Candriam's in-depth negative screening of oppressive regules, i.e. countries in which human rights are severely breached on a regular basis, fundamental liberties are systematically denied and the security of people is not guaranteed due to government failure and systematic ethical breaches.

For a detailed description of Cadriam's company-wide exclusion policy, and the thresholds applied, please refer to the <u>Candriam Exclusion Policy</u>.

• Investment strategies with ESG integration

A part of Candriam's investment strategies are managed with **ESG integration**. This is the case, for example, of some of the strategies classified as Article 8 under the European Sustainable Finance Disclosure Regulation (SFDR).

The ESG integration processes for different asset classes are described in detail in the next sections.

In addition to ESG integration, these strategies are also subject to **Candriam's company-wide exclusions**, as well as to **specific exclusions** that depend on the strategy. For a detailed description of Candriam's exclusion policies, please refer to the **Candriam Exclusion Policy**.

• Investment strategies with ESG integration and ESG-eligible universes

For a part of its investment strategies, Candriam applies both **ESG integration** and **ESG-eligible universes**. This is the case of strategies classified as Article 9 under SFDR as well as of certain Article 8 strategies. For these strategies, an ESG-eligible universe is determined using the outputs of the corporate and sovereign ESG analytical frameworks described above. In the selection within these ESG-eligible universes, we then apply the integration approach which is described in the next sections.

¹ A Candriam fund may have indirect exposure to some of the excluded activities if investments in such activities are made through index derivatives or external funds/ETFs not managed by Candriam.

In addition, these strategies are also subject to **Candriam's company-wide exclusions**, as well as to **specific exclusions** depending on the strategy. For a detailed description of Candriam's exclusion policies, please refer to <u>Candriam Exclusion Policy</u>.

b. Approach to ESG integration @ Candriam

ESG integration is critical for investing decision-making, given that the ESG trends and challenges our society face could test the resilience of financial and economic systems. A the same time, these challenges also offer opportunities to foster innovation through our investments – innovation which in turn can fuel new pockes of growth. This goes beyond environmental matters and includes the social and governance dimension of corporate behaviour.

Thus, fully integrating ESG reflects our conviction that specific environmental, social and governance issues are being and/or will be priced in by financial markets participants through policy, technological and/or societal change. In fact, in this regard, traditional financial metrics and accounting statements are inherently backward-looking and tell only part of the story. ESG analysis adds essential layers of information that capture the "intangible" aspects that are not fully captured by traditional financial analysis. For instance, as far as corporate issuers are concerned, a growing share of companies' value is derived from intangible assets like brand, reputation, human capital and innovation. Thus, sustainability-related risks, when realised, can potentially impact stock value not only through their physical impacts, but also through their effect on brand, goodwill etc.

Candriam's portfolio management teams therefore integrate within their investment process financially relevant ESG factors, taking into account the specificities of each asset class. The objective is to leverage on ESG knowledge and information across all our investments, whilst adapting for the distinct nature of each strategy.

The foundation of this integration is the ESG assessment described in section 3, above, conducted using Candriam's proprietary ESG analytical frameworks.

However, ESG integration can only be effective when it is material and relevant to the investment strategy at hand and the respective portfolio manager's decision-making process. ESG risks and opportunities vary across sectors and regions, and may have varying impact depending on the investment horizon or asset class. It is thus essential that portfolio managers, when making investment decisions, understand the ESG issues that are material for assessing the risk-return trade-off and then integrate those into the investment process. ESG integration requires thus a thorough understanding of the investment issues at stake, which will enable portfolio managers to harness the power of environmental, social and governance data, analysis and recommendations to inform the investment decision-making process.

Broad and deep ESG integration of ESG ensures that opportunities arising from ESG megatrends and risks embedded in ESG practices will continue to drive alpha generation and/or risk mitigation. Moreover, ESG integration assists in upholding our fiduciary duty to clients by taking into consideration both financial and extra-financial aspect to achieve better long-term risk- adjusted returns.

The ESG integration processes for different asset classes are detailed in the sections that follow.

c. ESG integration for equity strategies

> Traditional equity strategies:

At Candriam, we integrate ESG information and analysis into equity investment decisions in order to better assess the risks and opportunities that stem from the business activities and operations of companies. Respecting and preserving the distinct nature of each philosophy and approach across our range of fundamental, thematic and emerging markets funds, Candriam's fundamental equity investment strategies are impacted at each of the following 4 levels:

- 1. ESG exclusions from the investment universe
- 2. ESG integration into fundamental analysis of companies
- 3. Consideration of ESG in company valuations
- 4. Impact of ESG on portfolio construction

1. ESG exclusions from the investment universe

In a first step, we rule out companies that are in breach of the principles of the **United Nations Global Compact**. These ten principles cover four main categories: Human Rights, Labour, Environment, and Anti-Corruption. The norms-based review identifies companies which have significantly and repeatedly breached any of the principles of the United Nation's Global Compact.

We also exclude companies that are involved **in controversial weapons** (biological weapons, chemical weapons, white phosphorus weapons, anti-personnel landmines, cluster munitions and depleted uranium weapons), **Tobacco**, **Thermal Coal** and operate in **Oppressive regime**.

2. ESG integration into fundamental analysis of companies

Candriam's fundamental equity strategies² take into account the "Business Activities Analysis" and "Stakeholder Analysis" scores resulting from Candriam's corporate ESG analytical Framework in fundamental analysis and in "Company Valuation" as follows:



Quality of Management

In order to obtain a holistic view on the overall governance and soundness a company's management, we assess a company's relationships with several stakeholders by considering and integrating qualitative ESG information and quantitative ESG scores that result from the ESG stakeholder analysis. Further to the assessment of strategy, stability, track record, corporate communication and other financial criteria, we assess the Management team on its relationships with its stakeholders.

The ESG Stakeholder analysis is taken into account in the Quality of Management assessment. If the company 'stakeholder' score is in the bottom 20% of its universe³, the 'Quality of Management score' cannot be 'green'.

Business Growth

In the assessment of business growth, the ESG Business Activities Analysis of issuers is taken into account. Candriam has identified key long-term sustainability trends which strongly influence the environment in which companies operate and which influence their future market challenges and long-term growth and prosperity.

Five Key Sustainability Challenges, that is Climate Change, Resource Depletion, Health & Wellness, Demographic Shifts and Digitalization, are analysed in order to assess the growth potential in conjunction with other key market drivers and regulatory risk.

More specifically, we consider the supply and demand dynamics as well as market drivers, the **score resulting from the ESG Business Activities analysis**, and potential regulation constraints to determine the overall score for the pillar.

Competitive Advantage

² Applicable for developed markets (Emerging Markets get a specific analysis)

³ Investment universe varies across strategies

We perform an intrinsic analysis of products and services, R&D, customer support, and other areas relevant to the company's business, including opportunities and risks resulting from the ESG considerations. Very often, ESG factors directly impact the strategic positioning and innovation of a company relative to its peers through its brand, product/concept/services leadership, costs, R&D, marketing and distribution.

We use the Porter concepts to analyse the competitive position of the company in its industry, such as the threat of new entrants, threat of substitutions, and the bargaining power of suppliers and customers. We check potential regulatory constraints and assess their impact on the competitive advantage of the company, and opportunities that arise as well **barriers to entry** resulting from new environmental policies. Considering the ambitious Climate objectives of many countries across the globe, and the ensuing regulation and legislation regulating emissions and pollution, we expect companies that have business activities sustainably and positively contributing to those environmental objectives, to outperform in the long run.

Final Fundamental Assessment

As **ESG factors** are taken into consideration in the evaluation of **Quality of Management** on the one hand, and the assessment of **Business Growth** and **Competitive Advantage** on the other hand, they directly impact the overall assessment of those two building blocks of Candriam's fundamental equity analysis as well as the score attributed to each one.

Therefore, the ESG assessment is a contributing factor to determine the final colour/score of a company, which in turn will determine the weighting of this position in the final equity portfolio.

For each criteria, companies receive one of the following scores: 0 (weak), 1 (medium) or 2 (strong quality). All the five scores are then compiled in order to get a global score/colour grade of the companies which determine the "quality score" of a company: "High Quality", "Satisfying Quality" and "Low Quality".

3. Consideration of ESG in company valuations

We further evaluate the dynamics of companies' profitability and growth, the liquidity of the equity, and valuation. Our valuation is predominantly based on DCF models using at least five years of projected Free Cash Flow, based on our internal projections.

We adjust the discount rate based on the final score/colour of a company which **takes into account ESG criteria**. For example, for green companies, we reduce the discounting rate within our DCF. This modification has a significant impact on the DCF- valuation.

4. Impact of ESG on portfolio construction

After filtering on the basis of thematic, sectoral and/or geographical criteria, the eligible universe is reduced according to norms-based exclusions and controversial activity exposures.

Within this eligible universe, the process is mainly colour-based, bottom-up stock selection; **weightings** in the portfolio are function of the global colours of the companies. The sector weight deviations from the benchmark are not a strategic objective; they result from our convictions on individual stocks, with top down sanity checks and other deviation boundaries.

The weight is significantly impacted by the colour grade (that considers the ESG scores and recommendations as described above), and the upside potential derived through our valuation analysis (that takes the ESG score into account as well).

We favour companies that are 'green' in all aspects. An 'orange' company will have a lower weight and 'red' companies are in principle excluded, or extremely reduced, depending on the process.

> Thematic equity strategies:

ESG is integrated into the investment process of thematic strategies at two levels.

Firstly, based on a Business Activity Analysis, Candriam's thematic approaches select companies providing solutions to address the global sustainability challenges to which our economy and society are exposed. The analyses conducted in this phase result from synergies between the ESG Analysts and the thematic Investment Team. The thematic Framework is not only central to the strategies, but is the starting point of the process. All issuers must successfully pass this stage, otherwise they are excluded.

The investable universe is therefore the result of a selection that fully integrates one or more pillars of the ESG triptych into its theme.

For more information about our different thematic strategies, please refer to our dedicated <u>Thematic Transparency Code</u>.

The ESG integration process is similar to the one described above for the traditional equity strategies, but applied to the defined thematic universe.

d. ESG integration for quantitative equity and index strategies

In quantitative portfolios, we integrate ESG factors at two steps of the investment strategy: in a first step, the quant process defines the eligible universe, in a second step, ESG indicators are being employed in the optimisation process to build the portfolio.

1. Eligible universe (Positive/ negative screening)

In first instance, we rule out companies that are in breach of the principles of the United Nations Global Compact following the ESG assessment negative screening. The so-called Norms-based review identifies companies which have significantly and repeatedly breached any of the principles of the United Nation's Global Compact.

We also exclude companies that are involved in controversial weapons (biological weapons, chemical weapons, white phosphorus weapons, anti-personnel landmines, cluster munitions and depleted uranium weapons), Tobacco, Thermal Coal and Oppressive regime.

For our SFDR article 9 strategies, we also apply a positive screening by creating an investment universe based on the Best in universe companies only which are identified by the ESG analyst team.

Portfolio Construction

In our portfolio construction, we include two additional ESG indicators as optimization constraints to attain our sustainable objectives.

- Carbon Footprint: Portfolios aims to have a lower carbon footprint than the Benchmark. For SFDR article 9 funds, the decarbonization level is set at minimum at 30%.
- ESG score : The strategies aims to have a higher ESG score than the benchmark.

The application of this ESG integration process for the passive investments strategies forces to sell the worst scores and highest carbon emitting companies and buy the highest ranked/ Low carbon emitting companies.

e. ESG integration for fixed income strategies

We have a duty towards our clients to accurately assess the creditworthiness of the issuers we lend money to but, at the same time, also assess the manner in which this money will be used. In order to uphold this responsibility, **Governance** and **Climate Change** along with **social** awareness are central to our **ESG Integration approach** applied across all our fixed income assets to **mitigate risks for investors**.

We believe that all issuers must display sound **Governance** practices. Numerous studies have found that issuers with weak practices are more likely to be involved in controversies and underperform against peers, thereby jeopardizing their ability to repay their debt.

For corporate issuers this implies proper board and oversight structures. For sovereigns this includes the policies implemented to ensure political stability, freedom of its citizens and eradicate corruption.

We strongly believe that **Climate Change** is the predominant challenge of our times. Climate change will intensify existing risks and generate new risks for natural ecosystems and human systems, including businesses and governments. As stated by the UN PRI, "financial markets today have not adequately priced-in the likely near-term policy response to climate change". We fully concur with this statement and therefore strive to ensure that climate change risks are taken into account throughout all our investments.

At Candriam, ESG integration for fixed income is underlined by three key pillars:

- 1. a holistic top-down approach,
- 2. a focus on material factors,
- 3. A systematic process.

A true ESG integration approach is based on synergies between investment teams and ESG analysts. At Candriam, we have implemented a **dedicated Committee** that combines our credit and ESG experts to discuss ESG issues impacting specific sectors and regulatory frameworks.

1. Holistic top-down approach

We apply a **holistic top-down approach** requiring an overall assessment of all the aspects of a business, sector and country exposure to material ESG issues. For corporates, Candriam's ESG analysis performs a top-down assessment of how business activities are aligned with key sustainable challenges and how the different stakeholders are being managed. For sovereign issuers, we assess how a country manages its human, social and natural capital by applying policies that support both short and long term sustainable development.

2. A focus on material factors

We focus on **Environmental, Social and Governance factors** impacting credit worthiness and/or financial performance of corporate and sovereign issuers. ESG materiality varies across sectors, countries, and, at times, at the issuer level. We use a sector-based approach to identify the aspects representing high-impact risks to enhance risk-adjusted performance.

3. A systematic process

These ESG criteria are **systematically integrated** in Candriam's corporate and sovereign credit recommendations. We do not limit our analysis to examining historic data; we use a forward looking approach, meaning that we will determine how these material factors may evolve in the future.

> Corporate issuers:

Our team of credit analyst/portfolio managers analyse the fundamental Business Profile and Financial Profile of issuers. We integrate our ESG analysis in industry risk, business model, and management pillars of the Business profile.

Our **ESG Business Activities** Analysis, which assesses a company's business model exposure to Candriam's five key sustainable challenges, is embedded in **Industry Risk** and **Business Model pillars**. The integration of the analysis enables us to identify industry risk stemming from key sustainability challenges as well as how the company addresses these challenges.

Candriam's **ESG Stakeholder Analysis is embedded in the Management pillar** of the business profile. The analysis allows for a holistic view on the company's relationships with stakeholders and thus providing further insight on the quality of management.

> Sovereign issuers:

Our Sovereign Debt fund management teams use Candriam's Sovereign Risk Model that establishes a common risk scale for all Developed and Emerging Market countries based on fundamental analysis of macroeconomic and structural reform/political risk trends. We analyse and categorize all countries from our sovereign and emerging market debt universe into groups on the basis of their risk profile. ESG factors are naturally embedded in structural reform/political risk trends assessment.

Our structural reform and political risk assessments are based on annually-reported Environmental, Social and Governance/Government indicators.

■ These Quality of Government indicators encompass political stability and corruption control, rule of law, absence of or levels of violence and terrorism, and regulatory quality and cost. Political accountability means building public institutions with strict audit and control systems that deter corruption practices, good management of public resources, and an independently functioning justice system. Data is sourced from the World Bank World Development Indicators database, updated annually.

- The **Quality of Institutions** and the assessment of the overall **Business Environment** are evaluated using the Ease of Doing Business survey. The ease of creating and running a business in a country depends on several regulatory factors such as the protection of property rights, the quality of contract enforcement, and the fair resolution of legal disputes between market participants. We favour countries in which investment is supported and regulatory burdens are limited. We assess the ability of governments to formulate and implement policies that promote economic growth. The Ease of Doing Business Index is produced annually by the World Bank.
- Structural Reform Momentum is tracked using both quantitative indicators, such as the Gini Index of poverty and inequality, as well as qualitative indicators. We evaluate the country's development path, fairness, percentage of population below the poverty threshold, openness and access, rule of law, voice and accountability, and political stability.
- The **Environmental Impact** using measures of the country's ecological footprint and biological capacity is also reviewed. Poverty and inequality data, including the Gini Index, are sourced from the World Bank. Ecological data is sourced from the Global Footprint Network on an annual basis.
- The assessment of the efficiency and sustainability of a country's **Monetary Policy Framework** is measured by the Central Bank's independence and credibility. Inflation targeting increases a Central Bank's credibility and its commitment to managing inflation. These variables are individually analysed, inputted, and maintained by Candriam's Emerging Markets Debt Team.

Impact on portfolio construction

The impact on Portfolio construction is the following.

- If Credit rating is CR4/CR5, the issuer cannot be included.
- If credit rating is between Cr1 and CR3, the following applies to portfolio construction.
 - o We provide a weight based on:
 - Credit score (ESG integrated)
 - Macro assessment.
 - Relative value opportunities (yields, Spreads, Prices)
 - Market assessment (high yield, IG, EMD etc)

5. Governance

This ESG Integration Policy is diligently overseen by Candriam's ESG Investments & Research Department and by Candriam's Portfolio Management functions. The ESG Integration Policy is reviewed and, if necessary, updated at least annually.

In the case of strategies for which ESG integration is linked to ESG Key Performance Indicators, the Risk Management Department ensures that the strategies are aligned with the predefined KPIs. Breaches are handled via the Candriam Breach Resolution and Escalation Policy, and reported to the Sustainability Risk Committee.

These processes are backed by Candriam's robust firm-wide ESG Governance structure:



The strategic decisional bodies are described below:

- Candriam's Group Strategic Committee (GSC) is responsible for strategic sustainability
 matters. It regularly assesses corporate ESG risks and opportunities as well as the roadmaps
 for the development of our sustainability offering. The GSC is also involved in key ESG and
 CSR initiatives.
- The company-wide Sustainability Risk Committee (SRC), reporting to the GSC, conducts strategic assessments of sustainability risks that relate to Candriam's investment management activities. To do so, it defines sustainability risks and adverse sustainability impacts within the ESG Risk Due Diligence Framework. It is also responsible for reviewing and validating certain sustainability-related exclusions.
- The **Proxy Voting Committee** provides strategic guidance on proxy voting best practices and monitors Candriam's voting policy. It arbitrates any issues escalated by the Engagement & Voting Team and conducts a yearly review of processes.
- The Candriam Institute for Sustainable Development oversees Candriam's philanthropy and community-impact programmes, through the support of initiatives in ESG research and education and in the social impact domain.

Candriams ESG Business Steering Committees are described below:

- The **ESG Steering Committee** coordinates the implementation of the strategic ESG roadmap, relying on several agile investments and on its operational and IT workstreams.
- The CSR Steering Committee oversees and coordinates the implementation of the CSR roadmap across staff, clients, the operational value chain, governance and the community.