

2022



# Attribution Report

APPROACHES AND OUTCOMES OF ESG INTEGRATION



GOVERNMENT PENSION FUND

2022



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GOVERNMENT PENSION FUND

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## GPF Actions to Drive ESG Attributions in the Future



## Social, Environmental, and Governance Attributions of **GOVERNMENT PENSION FUND (GPF)**

The Government Pension Fund or GPF was established under the Government Pension Fund Act B.E. 2539 (A.D. 1996) to guarantee pension payments and promote savings as well as provide welfare and other benefits to its members. GPF focuses on fund management and puts great emphasis on creating a balance between “Preservation of Capital” and “Return on Investment” under risk appetite levels, and in accordance with the Fund’s vision of being the “Thai pension fund with world-class standards”. To ensure that its members can enjoy a sound quality of life once retired, GPF aims to produce good investment returns for retirement adequacy and to manage the fund sustainably with honesty and integrity. At present (as of September 2022), GPF has net assets (after deducting expenses) in the amount of 1,201,438 million baht, with 1,205,978 members and 285 employees (including those working at affiliated companies).



To become the “Thai pension fund with world-class standards”, GPF must generate healthy returns by beating inflation so that once the members are retired, their money invested through the Fund grows more than the inflation rate. Currently, the funds managed by GPF are among the highest in Thailand with investments in more than 20 asset classes across the globe. At the same time, GPF is one of the first pension funds integrating Environmental, Social and Governance (ESG) factors into its investment operations.



## The Pension Fund Managing Investments with Social, Environmental, and Governance Responsibility to Create a Sustainable Investment Ecosystem

With an important mission assigned to take care of members’ savings as well as a vision to become the “**Thai pension fund with world-class standards**”, GPF has been committed to managing its funds on the basis of good governance, ethics, and codes of conduct, as well as performing with prudence, caution, honesty and integrity throughout 25 years of its operations. This included establishing strict measures to prevent conflicts of interest and governing the operations to strictly comply with regulations and laws.

As a large institutional investor (Universal Owner) with net assets under management worth more than 1.2 trillion baht, and holding a large number of securities across the world, GPF recognizes that its investments will have an impact on society

and global populations. For this reason, it must consider ESG impacts by acting as a responsible investor and shareholder accountable for the mission of creating social returns, in tandem with generating financial returns from investments. This is due to its fiduciary duty to protect the interests of members. Although focusing on ESG, GPF will not go beyond “Ethical Investing” or “Impact Investing”, which creates a trade-off between financial returns and social benefits since the Fund is responsible for overseeing the members’ savings and benefits. Moreover, GPF has a duty of being a good corporate citizen, investing in businesses responsible for society, communities and the environment and adhering to good governance principles.



Figure 1 – Dimensions of Responsible and Sustainable Investments

## ESG

Despite prioritizing ESG, GPF will not go beyond “Ethical Investing” or “Impact Investing”, which creates a trade-off between “Financial Value” and “Social Value”.

In addition to taking ESG-related issues into consideration during investment decision-making, GPF also actively exercises its shareholder rights by attending shareholders’ meetings in entities where it has invested to express its opinions and suggestions according to the Corporate Governance principles so as to uphold fairness for all stakeholders. Moreover, it also encourages the companies in which it has invested to pay great attention to the environment, society, community and good governance along with business operations because they are important factors driving sustainable development.

GPF believes that investing in ESG-based companies will increase opportunities, and create a decent long-term return on investment consistently since companies running businesses with a focus on ESG are likely to have a strong performance. This, in turn, creates a better investment return and a distinguished reputation. In addition, business entities employing transparent and good quality internal management systems, with sound employee relationship can reduce fraud-related risks, turnover rates, training costs for new staff, product quality and productivity. These factors will ultimately raise profits and create positive impacts on corporate value, making organizations grow sustainably.



### GPF Journey to Create a Sustainable Investment Ecosystem

Throughout 25 years since its establishment, GPF has been well aware of managing and investing with good governance. Before the year 2018, the Fund jointly sponsored the “Principles for Responsible Investment” or PRI, as well as managed its funds according to good governance principles, upholding ethics and codes of conduct continuously. To become the “**Thai pension fund with world-class standards**”, and to create a “**sustainable investment ecosystem**”, GPF has integrated national and international best practices into the principles and methodologies of investments and operational management, along with developing ESG investments continuously.

- 2018 onwards** ● GPF has strived to become a leader in ESG investments in Thailand, by integrating ESG factors into its investment analysis and decision-making processes, including developing the ESG-related questionnaires to verify its operational status as a responsible investor.
- 2019** ● GPF together with 32 institutional investors, announced their intention to sign the “Negative List Guideline” in listed companies with ESG issues, and began integrating ESG criteria into a selection process of external fund managers.
- 2020** ● GPF, in collaboration with the World Bank, developed the “ESG Scoring” called “GPF-ESG Weights and Scores: Asset Valuation Methodology©” to analyze and estimate valuations of domestic equity and private bonds GPF has managed by itself.
- 2021** ● GPF began incorporating sustainability factors into its long-term “Strategic Asset Allocation” (SAA), and integrating the “United Nations Guiding Principles on Business and Human Rights” (UNGPs) into GPF Office’s policies.
- 2022** ● GPF pays great attention to environmental issues, especially reducing greenhouse gas (GHG) emissions, with commitments to supporting Thailand’s goal to decrease GHG emissions to zero (Net Zero), known internationally as “Nationally Determined Contribution” (NDC).

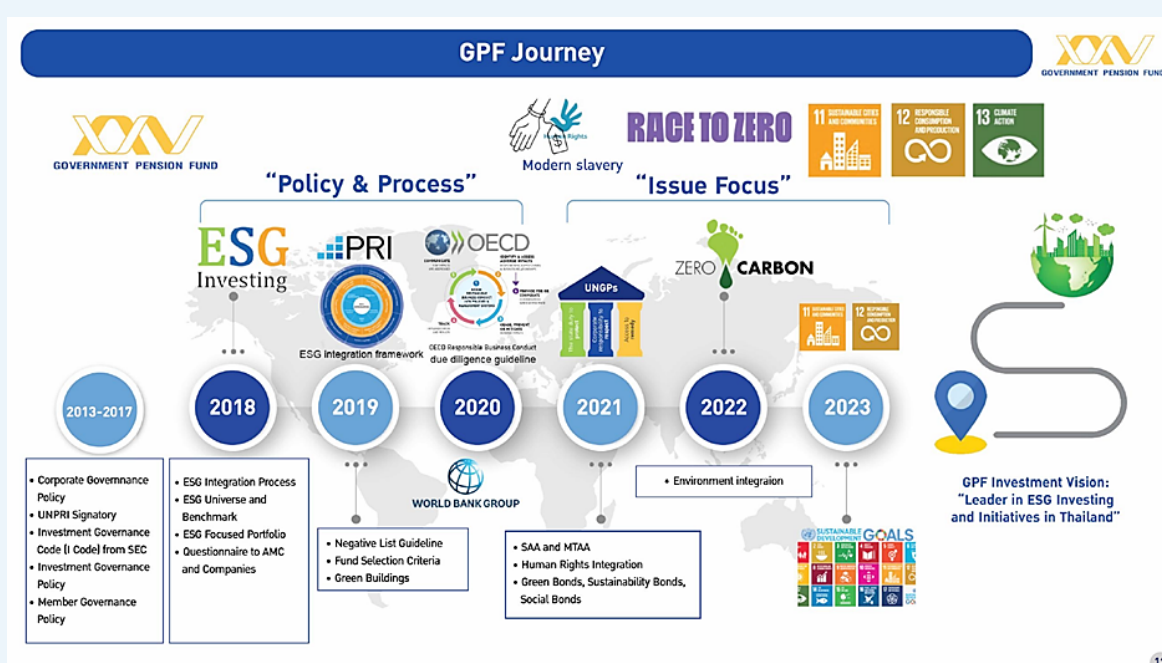


Figure 2 – GPF’s ESG Journey





## GPF Commitment to Managing Investments According to ESG Principle to Create a “Sustainable Investment Ecosystem”

To create a sustainable investment ecosystem, GPF has managed its investments according to a three-step framework, including: **1) Pre-investment** – GPF always determines policies and analyzes as well as examines the company’s data and performances (due diligence) prior to investing. **2) During investment** – GPF focuses on creating engagement by visiting and discussing with executives of invested businesses, and **3) Follow-up and report** – GPF monitors and reports the performances of organizations GPF has invested in.

Before and after investing, GPF adopts the “Principles for Responsible Investment Practices” or PRI as a framework for managing its funds. Prior to investing in any assets, GPF analyzes the ESG profile of businesses to be invested, in addition to conducting fundamental factors and financial status analyses, which have an effect on such asset valuation. This includes examining the ESG profile of investment portfolios. During investing, GPF positively engages with invested companies regarding ESG performances, including proxy voting and concerns raised in shareholders’ meetings, when there is a negative issue or incidents turning points occurring in business entities, in which GPF has invested. After investing, GPF always follows up and reports investment performances, as well as conducts scenarios & risk analysis in various patterns.

At the same time, GPF adheres to the principles of “Responsible Business Conduct” according to the Organisation for Economic Co-operation and Development (OECD) to manage its organization. Thereby, GPF has applied the “OECD Due Diligence Process” on human rights to evaluate itself across the organization, leading to the establishment of GPF human rights policy. GPF pursues its organizational missions under the principles of “equality, fairness, and non-discrimination”, covering all dimensions of its

supply chain, starting from its members, employees, business partners, to the society as a whole. As a result, GPF was bestowed the “2021 Human Rights Model Organization Award”, with outstanding level in the category of governmental organizations. The award was organized by Department of Rights and Liberties Protection, Ministry of Justice. GPF was one of 31 governmental organizations awarded, based on the organization assessment results across the nation. More importantly, GPF has applied sustainability issues to its investment processes, including setting up long-term investment strategies (SAA).

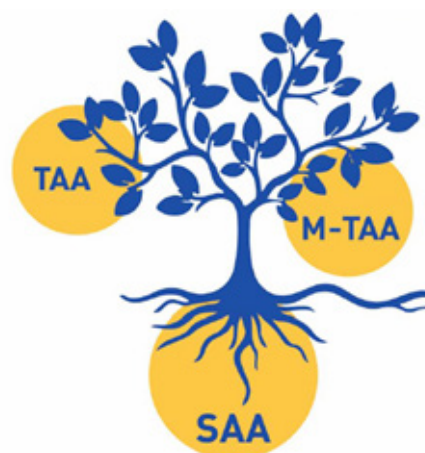


Figure 3 – Investment Strategy Framework with High Attention on Sustainability Issues



# Integrating ESG Factors into the Investment Process (ESG Integration)

GPF employs a comprehensive investment decision-making procedure in compliance with the GPF Act, and related regulations. The Fund, therefore, analyzes and diversifies investment risks, along with creating a balance between the capital preservation and return on investments within the risk appetite levels. As a large institutional investor, GPF recognizes the importance of ESG investments, believing that such investments will generate a decent financial return for its members in the long run, with positive impacts on society and the environment. Consequently, GPF has integrated ESG factors into its domestic and international investment procedures as follows:



GPF Investments		
Foreign Investments Managed by External Fund Managers	Domestic Investments	
	Managed by External Fund Managers	Managed by GPF
<ul style="list-style-type: none"> <li>• <b>Selection</b> by integrating ESG criteria.</li> <li>• <b>Engaging</b> in ESG operational issues.</li> <li>• <b>Reviewing</b> ESG operations in conjunction with operational performance assessments.</li> </ul>	Managing investments with the same direction as foreign fund managers.	<ul style="list-style-type: none"> <li>• <b>Bonds:</b> Integrating ESG factors into a credit analysis process.</li> <li>• <b>Equities:</b> Consolidating ESG factors into securities analysis and selection.</li> <li>• <b>Real Estates:</b> Paying great attention to environmental protection.</li> </ul>

A table illustrating the integration of ESG factors into GPF investment procedures

**Foreign Investments** GPF's overseas investments are managed by external fund managers. The Fund, therefore, integrates ESG factors into its external fund managers selection process, by designing questionnaires assigned to external fund managers, and verifying data accuracies (Due Diligence). After external fund managers were selected, GPF always meets and engages with executives of those fund managers regarding ESG operational issues to encourage and promote the implementation of ESG practices as agreed. Thus, the ESG performance of external fund managers is one of the criteria GPF uses to assess achievements of its external managers.

**Domestic Investments** GPF's domestic investment management is divided into two (2) parts; the first part is managed by external fund managers, while the latter part is run by the GPF investment team. For managing external fund managers domestically, GPF uses the same approach applied for foreign fund managers, by incorporating ESG factors into its operational procedures, starting from

selecting, meeting, discussing, to evaluating the external managers' operational results. For the funds GPF manages by itself, the Fund integrates ESG factors into its investment management of the main asset classes according to following approaches:

Bond Investments: For analyzing bond issuer's credit, GPF focuses on various factors thoroughly and comprehensively, including ESG factors, which are the cornerstones of sustainable investment principles.

Equity investments: GPF focuses on investing in securities with strong fundamentals. Thus, ESG factors are included in the criteria used for selecting stocks to be invested to assess status and performances of companies in the long-term.

Real Estate Investment: GPF invests in property, with a focus on sustainable operations, especially in energy and environment conservation in accordance with the "Leadership in Energy and Environmental Design" (LEED) green building standard, which have a positive impact on the health of tenants and building users in the long-run.

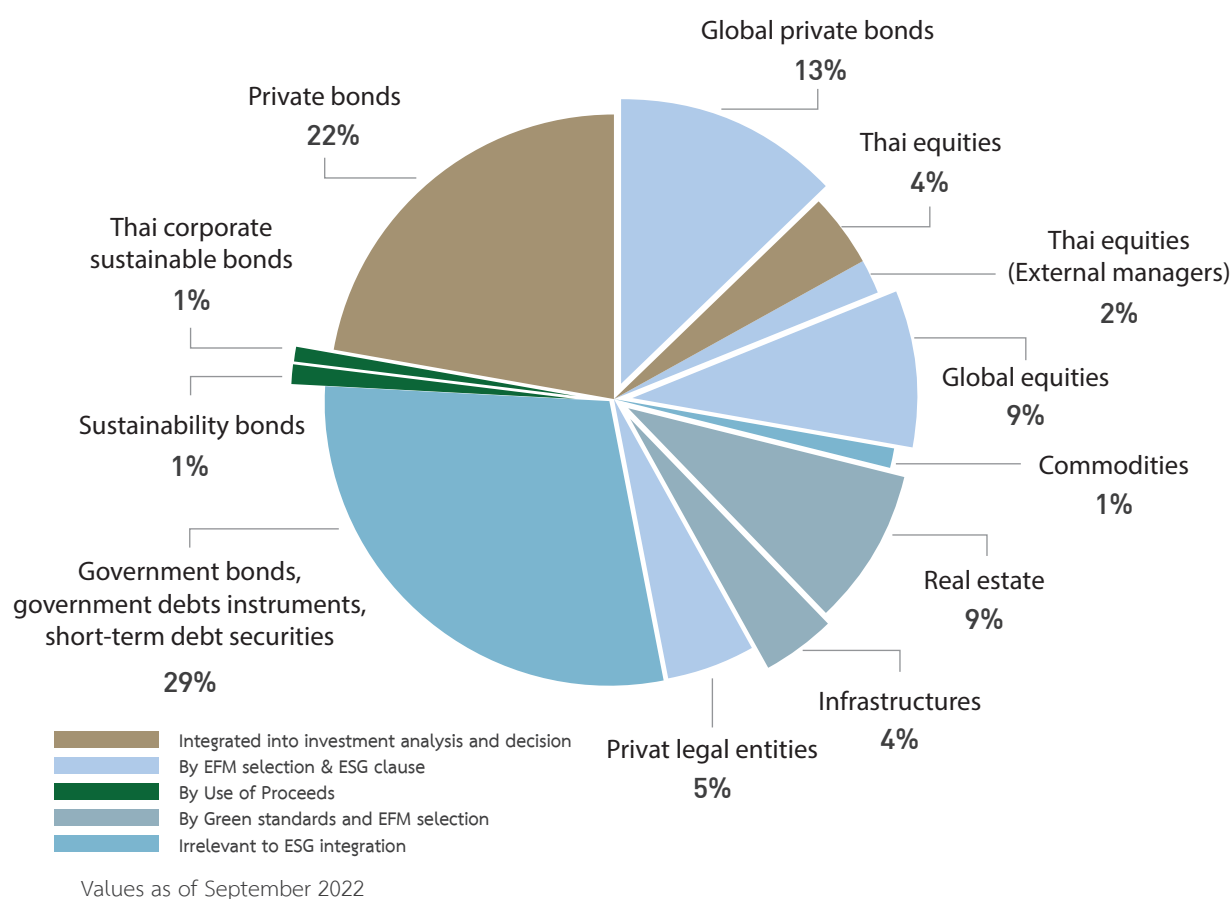
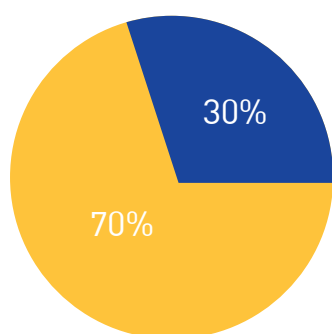


Figure 4 – Proportion of GPF Investments Divided by ESG Integration Methodologies



ESG Integration is accountable for approximately 70 percent of the member pool, with a remainder of approximately 30 percent mainly invested in low-risk assets focusing on capital preservation, such as government bonds, governmental debt instruments, and short-term debt instruments.

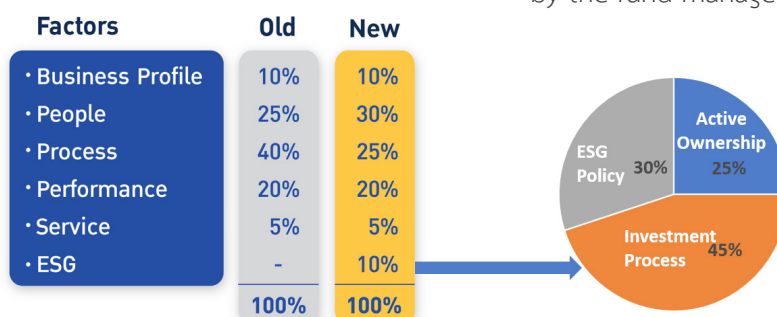


# Investments

## Carried Out by External Fund Managers

As for the investments GPF has assigned domestic and foreign fund managers to manage, the Fund has clearly established criteria for selecting external fund managers, using ESG factors as one of the criteria to select fund managers, consisting of six (6) main elements, namely;

- 1) Business Profile: Issues related to business operations, such as the fund manager's business strategy, the organizational structure and stability, the fee structure, etc., are taken into consideration.
- 2) People: The resources and availability of personnel involved in investment operations are pondered.
- 3) Process: The fund manager's investment decision-making steps and processes are considered.
- 4) Performance: The fund's performances, in terms of yields are compared with the benchmarks and other similar fund managers (Peers).
- 5) Service: The services provided to GPF in terms of investments and other aspects, such as knowledge transfer to the Office, are examined.
- 6) ESG: The use of ESG factors for formulating sustainability policies, analyzing and selecting securities, including discussions with invested businesses (Engagement) by the fund managers, are reviewed.



The fund managers passing the selection's criteria must have at least 80% of scores.

Figure 5 – ESG Scoring Criteria for Selecting External Fund Managers

## Examples of ESG Investments Carried Out by Foreign Fund Managers

### ROBECO The Investment Engineers

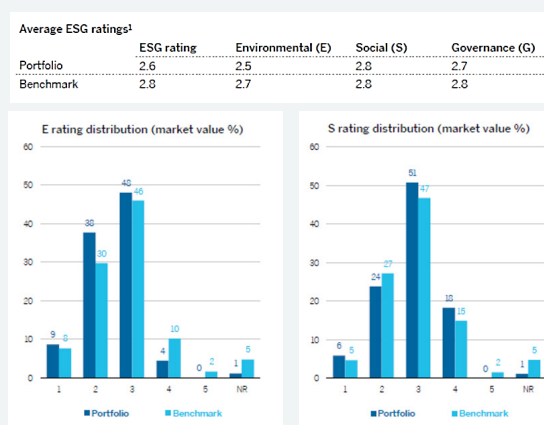
- Mandate: Global Bonds
- Vision & Mission: Creating wealth and good health by generating decent and sustainable return on investments for customers.
- Robeco uses the “ESG Integration” methodology since it considers that this approach helps reduce downside risks of bond investments very well through analyzing relevant ESG factors and materiality of each company invested. This technique will be used in conjunction with credit analysis, which is calculated as a fundamental score (F-score).
- Robeco employs more than 50 sustainability experts responsible for conducting research, being opinion leaders in the sustainable investment field. These professionals also participate in discussing (Engagement) with investing companies and customers to increase positive social and environmental impacts.



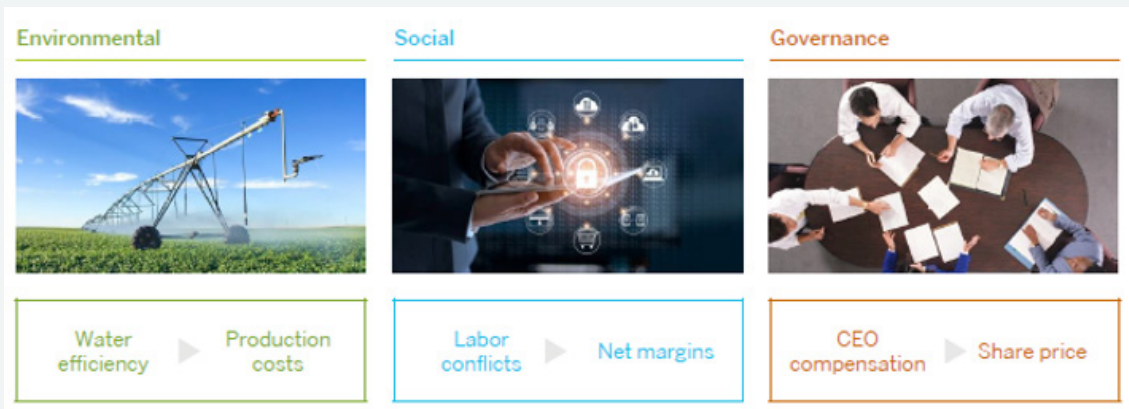
Source: Robeco

### WELLINGTON MANAGEMENT®

- Mandate: Global Debt Instruments
- Wellington believes that ESG-related factors significant to invested firms, will affect their performances, for example, water consumption efficiency will affect corporate production costs, while labor conflicts have an impact on net profits. Therefore, these ESG factors must be integrated into the company's credit analysis and investment decision-making.



Source: Wellington Management



- Wellington has developed the “ESG Score” used for investment considerations, by avoiding bond issuers with high ESG risks. In addition, it considers the amount of greenhouse gas (GHG) emissions of invested companies, and engages with such companies in order to support them in a reduction of carbon footprints. It is found that GPF’s investment portfolio managed by Wellington has the ESG profile better than the indicators, and also generates GHG emissions lower than the index.



- Mandate: Global Fixed Income
- Insight has implemented the ESG Integration according to the PRI framework, and assessed the ESG Score used for analyzing, and making investment decisions.
- Assessment of ESG Score and Carbon Footprints of investment portfolios GPF has employed Insight to manage; it was found that GTF’s [??] investment portfolios have the ESG profile better than the indicators, and emit GHGs lower than the index.

This portfolio assessment includes 187 bonds and 136 issuers.

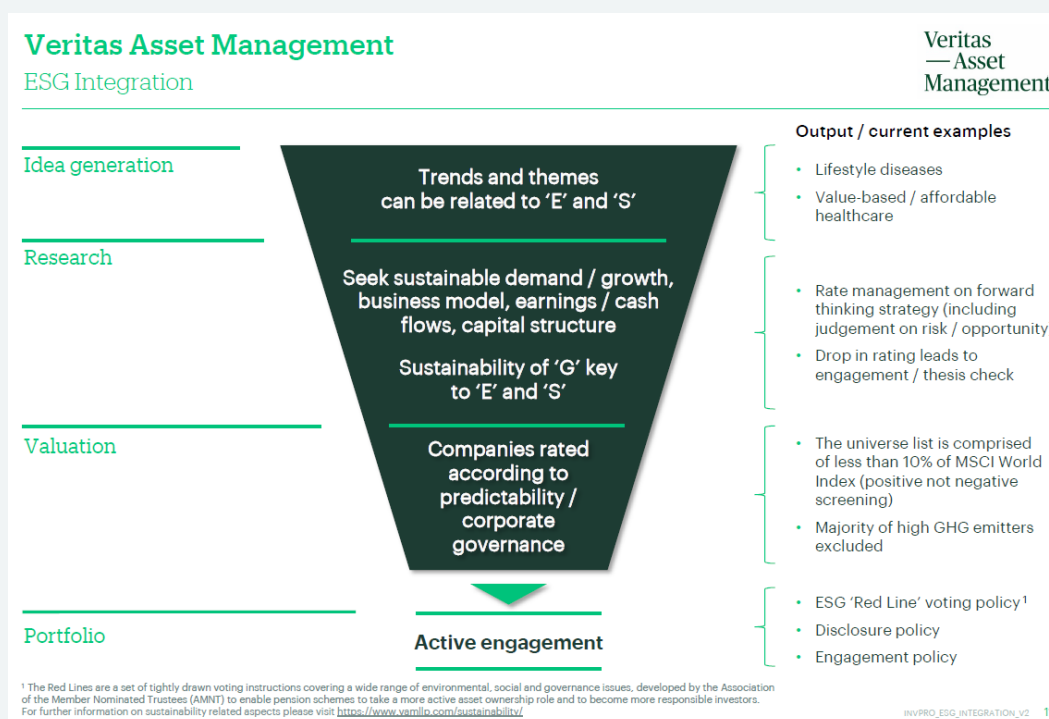
ESG average scores	Overall	Environment	Social	Governance	Coverage
Fund score	2.2	2.1	2.3	2.5	96.5%
Benchmark score	2.4	2.3	2.6	2.8	95.1%

Source: Insight Investment



## Veritas — Asset Management

- Mandate: Global Bonds
- Veritas uses a top-down ESG investment approach, starting from analyzing relevant trends or themes, selecting companies with sound fundamental and performances, as well as good ESG factors for investment (positive screening), to engaging with invested companies according to the set policies after putting money in.



Source: Veritas Asset Management

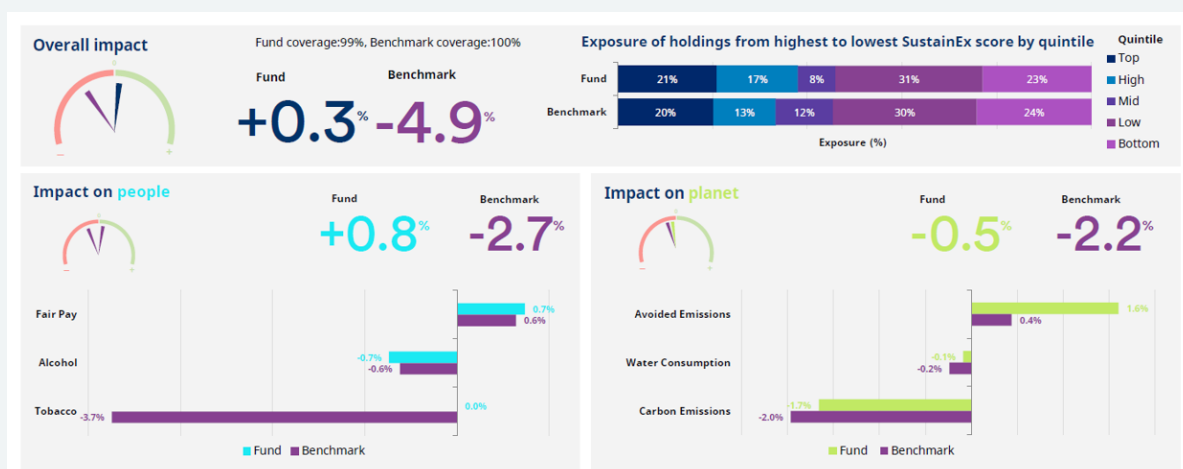


- Mandate: Global Equities in Developed Markets
- Baillie Gifford believes that a business operating sustainably, and caring for society and the environment can grow in the long-term. This is a positive factor for investment returns.
- Baillie Gifford has integrated ESG factors into its investing operations without using the “ESG Score”. However, this fund manager is focusing on looking for investment insights through analyzing and discussing with senior management of the invested firms.
- For the long-term global growth portfolio in which GPF has invested, Baillie Gifford has announced its commitments to encourage all companies in the portfolio to plan for transitioning towards the “Net Zero” appropriately (Net Zero Pathway).



## Schroders

- Mandate: Developed Market Global Equities
- Schroders continues developing the ESG practices since announcing its corporate governance policy in 1998. In 2007, it was a sponsor of the “Principles for Responsible Investment” or PRI Signatory. Schroders integrated the ESG factors into its investment procedures completely in the year 2020.
- Schroders’ ESG investment is not only referred to as the “Thematic Research”, but also uses the quantitative analysis tools (Analytics) to assess and report ESG impacts of investment portfolios. As of October 2022, the data indicated that the Global Equity Fund GPF has invested, has a positive impact on society and the environment as a whole (Overall Impact), with higher level than that of indicators.



Source: Schroders

## Allspring

- Mandate: Global Equities in Emerging Markets.
- Allspring Investment Philosophy: ESG issues have an effect on business financial performances, which are the same applied to stock valuations. In addition, the opportunities to engage with invested companies reduce investment risks.
- Allspring Investment Analytics is a tool to monitor, and report ESG related risks of invested companies, as well as the overall investment portfolio. The GPF’s investment portfolio report found that the Fund’s portfolio has “ESG Profile” better than the indicators, while its GHG emissions are also lower than those of the index.

## ESG Investments Managed by Three (3) Domestic Fund Managers



- Mandate: Thai Equities
- The fund manager has employed a corporate governance policy (I-Code).
- As part of its investment processes, the “ESG Score” has been developed to screen stocks to be invested. One Asset Management has also collaborated with AIMC’s Collective Action in case the invested company has ESG issues.



- Mandate: Thai Equities
- The fund manager has a clear investment governance code policy and ESG governance structure.
- For investment processes, ESG factors have been incorporated into the fund manager’s analysis and decision-making processes. Krungsri Asset Management uses the “ESG Score” framework for screening stocks to be invested. These investment processes have been developed based on data gained from ESG questionnaires and/or discussions with companies to be invested.
- The fund manager plans to join the PRI Signatory in 2023.



- Mandate: Thai Equities
- The Fund Manager has the comprehensive Responsible Investment Policy covering ESG, climate change aspects and active ownership guidelines in place all around which applied for both the overall organization and the investment process.
- The fund manager has the ESG integration process in alignment with the PRI standard. ESG assessment are done by internal template which information obtained by public information and discussions with investee companies. In addition, the fund manager also incorporates ESG information/ratings from reliable external service providers for verification and to form a broader view.
- The ESG risks have been managed in both the investment and corporate risk management processes.
- The fund manager participated in the “PRI Signatory” in 2021 and is now preparing for disclosing information about the “Sustainable and Responsible Investing Fund” according to the guidelines of The Securities and Exchange Commission (SEC).
- In 2022, KAsset has declared support for the Task Force on Climate-Related Financial Disclosures (TCFD) as an official TCFD supporter by following to the guidelines of Task Force on Climate-related Financial Disclosures (TCFD) covering four core elements of governance, strategy, risk management, metrics, and targets



# BOND INVESTMENTS

To select sound quality companies, and to reduce risks from not receiving principal and interest payments, GPF conducts credit analysis of bonds issuers by carefully taking various factors into consideration, covering all aspects. These include using ESG factors especially good governance, which is a basis of sustainable investment principles, to analyze issuers' credit. The credit score, which is a result assessed and analyzed from all factors, will be the significant data used in making decisions to invest in debt securities by GPF. The framework for considering and analyzing the credit of bonds issuers is as follows:

## 1) Core Credit Score includes:

- a. Business Overview consists of assessing industry environment, and company's competitive position. For analyzing business overview, the industry's sustainable factors and the company's business operations, especially environmental and social aspects, are examined as part of overall business trends in medium-to long-terms.
- b. Financial Status is comprised of capital structure and performance.

## 2) Modifiers consists of:

- a. A support from parent companies, shareholders or government.
- b. The company's quality factors include management quality, and ESG factors.

When conducting qualitative analysis of bond issuers, ESG factors will play an important role in assessing scores in this area, especially in the field of governance. This reflects in management quality assessment, financial disciplines, and levels of risk appetites, including treating various groups of stakeholders fairly, etc.

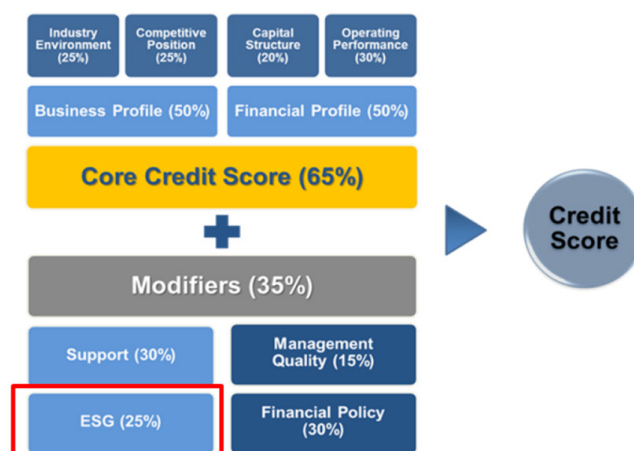
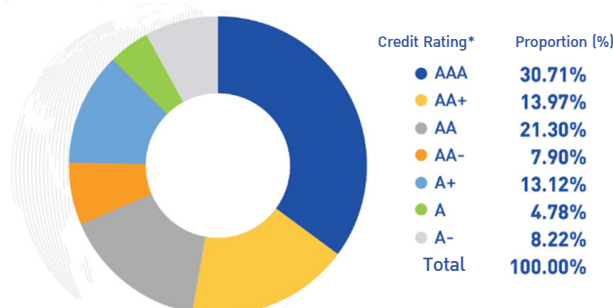


Figure 6 – Factors for Bond Issuer's Credit Analysis

#### Proportion of Investments in Thai Corporate Bonds of Member's Equity Funds Classified by Credit Rating

As of 30 September 2022

Total value: 101,068 million baht



Remarks: \* Credit ratings according to TRIS Rating and Fitch Rating (Thailand)

Tris	Definition	Notes
AAA	The highest rating indicates an obligor or a debt instrument with the smallest degree of credit risk.	Investment grade bonds
AA	The rating indicates an obligor or a debt instrument with a very low degree of credit risk.	
A	The rating indicates an obligor or a debt instrument with a low credit risk.	
BBB	The rating indicates an obligor or a debt instrument with moderate credit risk.	

Figure 7 – GPF's Investment Proportion on Thai Corporate Bonds

While overviewing the domestic bond investment portfolios, it was found that GPF has invested in "Safety Assets" with low-risks, and mainly focusing on principal preservation, such as government bonds, government debt instruments, and short-term fixed income assets. To diversify risks on its investments, GPF has invested in private debt instruments with risks and opportunities to receive higher returns by selecting bond issuers with decent credit scores and quality. ESG factors, especially governance have been integrated into the scoring process. At present, GPF only holds private debt securities with "Investment Grade", or having a credit rating of "BBB" or higher.

## Sustainability Bond Investments

Environmental, social, and governance bonds (ESG Bonds) or sustainability debt instruments are the fundraises used for operating sustainability activities, such as environmentally-friendly, or socially beneficial projects under the business extent of companies or government agencies issuing debt securities. The ESG bonds can be divided into four (4) main categories:

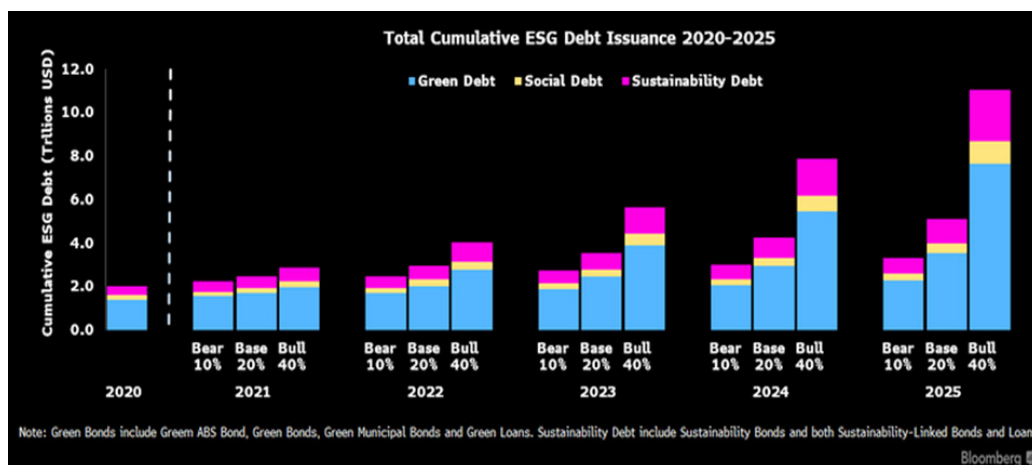
**1) Green Bonds** raise funds for developing projects related to environment.

**2) Social Bonds** raise money for social development, and improving community's quality of life.

**3) Sustainability Bonds** raise funds to implement environmental or social projects; and

**4) Sustainability-linked Bond** is a debt instrument, of which returns are tied to the issuer's performance, in line with sustainability goals. If issuers fail to meet a target within a specified period, they have to increase the coupon rate for investors.

Although ESG bond investments continue to expand globally, they are a small proportion of overall bond market values. However, analysts estimate that the sustainability market will be worth millions of dollars in the next few years. Thailand's sustainability bond market has raised funds since 2018, when the total amount of money raised was 8.2 billion baht. The market has expanded, and grown steadily, reaching 174 billion baht in 2021 (representing a 100% growth rate from the previous year).



Source: Bloomberg

Figure 8 – Global ESG Bond Expansion Forecast

Presently, GPF invests in domestic sustainability debt instruments, representing a total value of around 40 billion baht, an increase from 9.9 billion baht in the year 2020. The money raised from such funding are used for running environmental or social activities. As a result, they create positive impacts on ESG directly. For investing in sustainability debt securities, GPF doesn't analyze credits of debt issuing agencies differently from those of general debt instruments. This is to ensure that a quality of sustainability debt instruments is not inferior to that of general fixed income securities, and has a low-level risk. The majority of debt instruments held by GPF are Thailand's sustainability bonds. This Thai government fixed income received the "2020 Best Sustainability Bond Award" at the regional level. The funds raised were used for mitigating impacts of the 2019 Novel Coronavirus (COVID-19) outbreak, which has a serious impact on society. While, another part of the raised money was used for a construction of the Orange Line electric train project, which is an important transportation infrastructure.

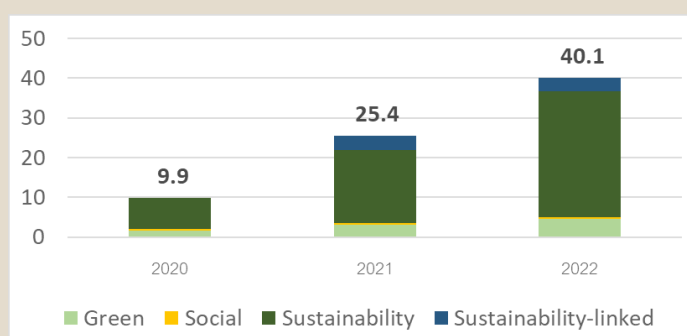


Figure 9 – Values of GPF's Sustainability Bond Investments (Billion baht)

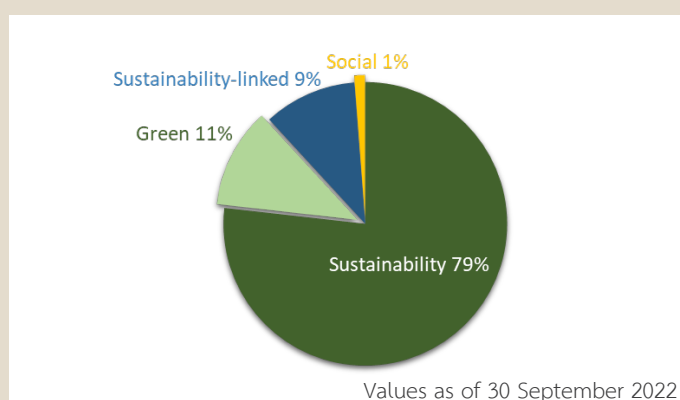


Figure 10 – Proportion of GPF's Sustainability Bond Investments



# Equity Investments

GPF focuses on investing in stocks with decent fundamentals. In order to assess the status and performance of companies to be invested in the long-term, the ESG factors have been integrated into criteria for selecting invested securities, in addition to fundamental analysis. Furthermore, GPF in collaboration with the World Bank have developed the “ESG Scoring” or “GPF-ESG Weights and Scores: Asset Valuation Methodology©)”, which is based on ESG data gained from MSCI ESG Scores, and corporate governance scores from the Thai Institute of Directors Association (IOD). The data from both sources have been compiled together with analyst’s point of view to analyze and evaluate equity securities in countries where GPF has managed its own investments. Additionally, GPF- ESG Scores are prepared for reporting in the ESG Attribution Report along with the quarterly financial statement as shown in the below example.



Figure 11 – Example of ESG Attribution Report of GPF

For evaluating securities or equity instruments, if a company issuing equities has ESG risks possibly affecting its performance, or long-term business operations, the “valuation multiple” or “discount rate” used in assessing the company’s shares valuation, will be adjusted to reflect such risks. This may also result in the adjustment of target prices according to the ESG performance of that company.



Figure 12 – Factors Used for Analyzing and Estimating Valuation of Securities to be Invested

The ESG factor assessment results used for estimating stock valuation will be analyzed in two (2) aspects, including:

**1. Financial Performance:** Various ESG-related risks expected to affect the company’s performance are used to forecast the financial statement, if the impact on operating results can be assessed.

**2. Value Aspect:** If a company has ESG related risks possibly having an impact on the performance or business operations in the long run, the value or discount rate used for estimating stock valuation will be adjusted. For example, if a company has ESG scores of more than 8 out of 10, i.e. low ESG risks, its target price will be adjusted by reducing the weighted average cost of capital (WACC) used in the business valuation model by 0.25 percent. As a result, the target price is increased by 4 percent, indicating that such securities are more attractive to invest.



## Exercising Voting Rights in Shareholders' Meetings

In addition to managing equity investments through the afore-mentioned ESG integration, GPF also strictly performs its duties as a responsible shareholder or “Active Ownership” by regularly and consistently monitoring the invested companies, and exercising its voting rights at shareholders' meetings of all companies, in which GPF has invested. These include arranging company visits to discuss with executives of these companies continuously regarding issues of opinions, or risks related to sustainability or ESG of such businesses. This leads to development, improvement and mitigating risks appropriately.

GPF seriously exercises its rights as a responsible shareholder, and develops the voting guidelines in accordance with good governance by voting “agree” on proposals considered to be in the best interest of the companies, in which GPF has invested in the long-term, with fairness to shareholders as a whole, transparency and verifiable. In the first three quarters of 2022, GPF assigned its representatives to attend and exercise voting rights at 88 domestic shareholders' meetings, representing 100% of attendances, with voting rights totaling 614 agendas. 33 out of 614 agendas were voted against by GPF. The “disagree” votes included transactions inconsistent with good corporate governance principles, most of which was about an appointment of directors. For example, a person nominated as an independent director holds a director position in the company for more than nine (9) years, or more than three (3) consecutive terms.



Figure 13 – Summary of Attendances in Shareholders' Meetings of Domestic Investments

For exercising voting rights in foreign investments, GPF has granted its external fund manager a proxy to vote on its behalf in accordance with the voting guidelines set by the Fund, which is in line with the principle of “Institutional Shareholder Services Inc.” or ISS. A total of 3,302 votes in 28 countries were conducted, 313 of which were disapproval, i.e. transactions were not complied with good corporate governance principles, and most of which were the appointments of directors whose qualifications were not appropriated.

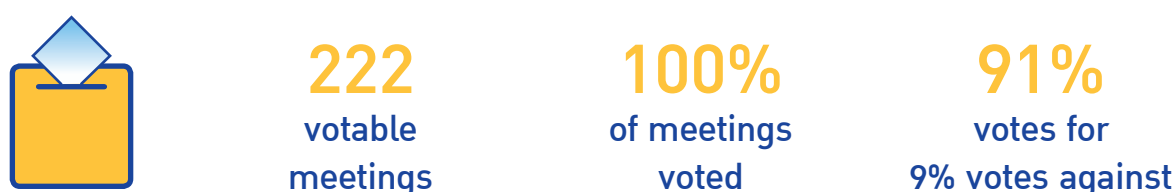


Figure 14 – Summary of Attendances at Shareholders' Meetings of Foreign Investments

## A Company Visit to Positively Discuss ESG Operations (Positive Engagement)

GPF focuses on engaging with stakeholders through conducting a company visit to meet and discuss with executives of invested business entities to share opinions, and develop ESG practices, as well as encourage companies in which GPF has invested to disclose ESG data by designing the ESG-related questionnaires, and conducting due diligences. If a company, in which GPF has invested, operates business regardless of ESG factors, GPF will meet with management of that company to discuss and follow-up such issues to find solutions and set preventive measures. For example, executives trade stocks by using insider information, etc. The aim is to emphasize and promote companies where GPF has invested to have better ESG practices. However, if the issues are not resolved, GPF will put such companies on the “Negative List”, and does not increase its investments.

During October 2021 – August 2022, GPF met with 10 public company limited (Plc.) in eight (8) business sectors, namely the agribusiness and food industry group, consumer goods, financial business, industrial products, real estates and construction, resources (energy), services and technology. The human rights and the impact of climate change were at the heart of discussions.

The discussions found that, overall, every public company in which GPF has engaged, focuses on sustainable business operations. A committee or sub-committee on sustainability has been set up to establish policies, and supervise, as well as monitor ESG operations to meet the targets set. However, each business group has weighted on each ESG aspect differently, depending on challenges and risks faced by each business. For example, the service sector focuses on governance and social factors, such as giving attention on customer data security higher than the environment.

Regarding human rights operations, it was found that every public company that GPF met and discussed has taken into account human rights principles when operating its business. The human

rights policies have been announced in accordance with international standards, such as “The United Nations Guiding Principles on Business and Human Rights (UNGPs), the “Universal Declaration of Human Rights” (UDHR), the “World Business Council for Sustainable Development” (WBCSD), or the “International Labor Organization” (ILO) standard. Such policies have been applied to all stakeholder groups whether they are employees, customers, partners, or contractors.

In addition, it was found that most of the public companies have employed Risk Matrix<sup>1</sup> as the main tool to prioritize human rights risks. Three (3) significant risks<sup>2</sup> the public companies have identified in their “Risk Matrix” are as follows:

### 1) Privacy & Personal Data Protection:

Currently privacy and personal data protection is considered a fundamental human right, and is under the “Personal Data Protection Act”. Public companies have managed such issues by establishing guidelines aligned with the “Personal Data Protection Act”, for example, appointing a committee or an employee to

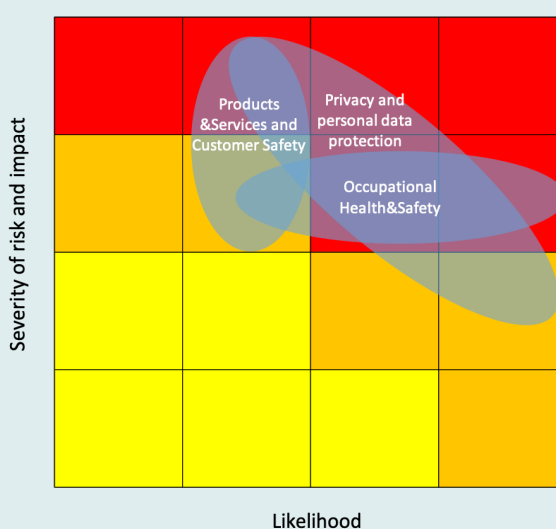
<sup>1</sup> A table of risks likelihood together with risks impacts

<sup>2</sup> High likelihood and/or high risks impacts

act as a “Data Protection Officer”, training employees to have knowledge and understanding of relevant operations, including improving the computer network system security.

**2) Occupational Health & Safety:** Public companies operate their occupational health & safety according to the applicable labor laws and regulations domestically and internationally. Businesses in the manufacturing sector will also face increased risks from the COVID-19 pandemic.

**3) Products & Services, and Customer Safety:** This includes the safety of customers using products and services.



Note: This Risk Matrix is compiled from the “Risk Matrix” of eight (8) public companies.

**Figure 15 – Risk Matrix: Human Rights Risk of Public Company Limited**

According to occupational health & safety, including products and services safety, public companies manage such risks by creating standards, and developing safety manuals and operational procedures (Safety Standards & Operational Procedures) for employees and partners or contractors. In addition, raw materials, production and services have been standardized, while products quality has been investigated. Besides, a training for involved people is conducted so that they understand such guidelines. However, many public companies pointed out that the key challenge is to apply the human rights policy to enforce with small and medium sized suppliers, which are not yet ready to operate in accordance with the guidelines.

For **environmental** practices, most public companies have announced the “Net Zero” targets to support Thailand’s climate change operations (Nationally Determined Contribution) under the Paris Agreement, in which 7 out of 10 companies invested by GPF, have set a “Net Zero” goal by 2050. One of the 3 remaining companies has set a “Net Zero” target in 2060 (B.E. 2603), while the other 2 firms are under studying and considering suitability of such goal setting. However, a data review carried out by GPF found that the intention intensity of each public company differs in details. For example, some companies have announced only the short-term goals, while the others have also set the long-term target. Additionally, some public companies have announced the scope of GHG emissions reduction differently, making the challenges unequal.

In terms of **GHG emissions reduction effort**, many public companies have planned to replace fossil energy with renewable power. For example, the technology group has installed solar panels at the base stations, the computer data center, and the base station conjunction. Meanwhile, the industrial goods, construction and energy (resources) business group is conducting a feasibility study on using carbon capture and storage (CCS) technology in their production processes. Meanwhile, the shopping center business is challenged with GHG emissions reduction in “Scope 2” because it consumes a lot of electricity. The financial sector is faced with a reduction of GHG emissions in “Scope 3”, especially small and medium business borrowers that require technical assistance from banks in setting the targets, executions, and measurements.

### Case Study: Engagement with PTTEP Business

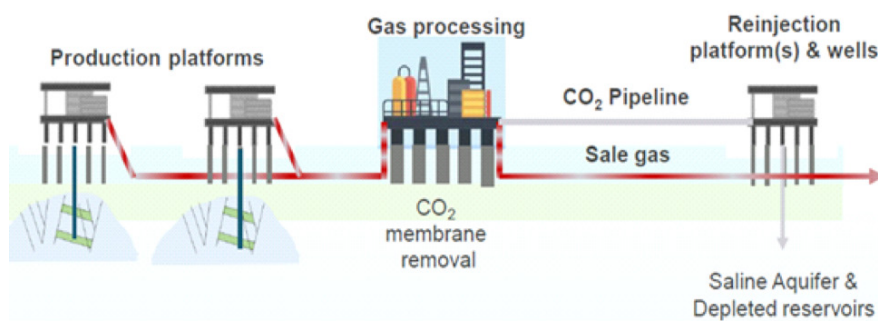
GPF has made an engagement in environmental issues with PTT Exploration and Production Public Company Limited or PTTEP by joining a field trip to study the carbon dioxide (CO<sub>2</sub>) capture and storage (CCS) project, operated by Japan CCS Company, PTTEP’s business partner in Japan.

The objective of this engagement is to learn about PTTEP’s technology and important environmental stewardship practices in Thailand. During a visit, the GPF team met with PTTEP executives and discussed the CCS project on which PTTEP has set a target to reduce GHG emissions to zero (Net Zero) by 2050. The company has developed the carbon dioxide (CO<sub>2</sub>) capture and storage project as a major plan to help achieve this goal. CCS is a large and important initiative and it is needed for Thailand to support the nation to reduce GHG emissions. Thailand has announced its intention at the United Nations Conference on Climate Change (COP26) to achieve “Carbon Neutrality” in 2050 and “Net Zero” GHG emissions in the year 2065.



To achieve the goals set, the CO<sub>2</sub> capture and storage project is required because increasing the proportion of renewable energy consumption and reabsorbing through reforestation alone is not enough to enable Thailand to meet these targets.

PTTEP will carry out the first ever CCS project in the Arthit offshore gas field, which is a natural gas field in the Gulf of Thailand, operated by PTTEP. The company has applied its knowledge and expertise in geoscience and petroleum engineering to this project. The CCS project is a process of removing carbon dioxides originally discharged from the gas drilling platforms in the Gulf of Thailand, to be compressed back into the underground rock layers in which a monitoring on whether carbon dioxide leaks back or not, is conducted. PTTEP started studying this project since 2021, and expects to commence its operations in 2026. The CCS project is anticipated to help reduce 700,000 tonnes of carbon dioxide gas per year. In addition to CCS project, PTTEP is also exploring future new energy projects, such as hydrogen and carbon capture and utilization (CCU).



## NET ZERO

Based on this positive engagement, GPF viewed that PTTEP conducts a business supporting Thailand's climate change very well. The company has set up the clear targets and action plans to reduce GHG emissions. As a result, it is suitable for PTTEP to start this pilot project in Thailand due to its extensive expertise with strong data on underground natural gas reserves. Finally, this project will play an important role in achieving the country's "Net Zero" goal. In addition, PTTEP can also create business opportunities in order to earn returns from this project in the long-term.



## Real Estate Investments

GPF, when investing in real estates, has placed great importance on sustainable practices with environmental, social and governance (ESG) responsibility, especially the environment since it has a positive impact on the health of both tenants and building users in the long run. As a result, GPF has integrated ESG factors as one of the main criteria in its selection process for external property fund managers. Questionnaires and due diligence related to data accuracy are conducted, while fund managers report the performances of invested real estates to GPF on a quarterly and annually basis.



### Management of Office Buildings Owned by GPF

For the office buildings that GPF has managed by itself totaling three (3) buildings, namely Abdulrahim Place, GPF Wireless Building and Bangkok City Tower, the Fund has paid great emphasis on energy and environmental conservation according to the “Leadership in Energy and Environmental Design” (LEED) green building standard. The LEED standard is divided into four (4) levels, consisting of Platinum, Gold, Silver and Certified by using the issues of water saving, energy consumption efficiency, and the environmental and air quality in buildings, etc., as criteria for consideration. At present, two (2) out of the three (3) afore-mentioned office buildings have received the LEED standards, while another building is under the implementation process. GPF has integrated ESG issues into its three buildings management, of which details are as following:





**Abdulrahim Place Building** (Certified with LEED Gold Standard) has operated the following green building activities:

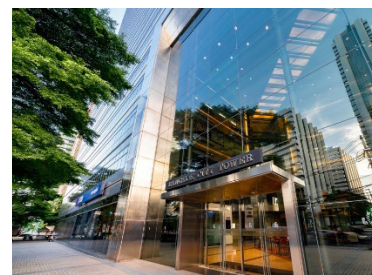
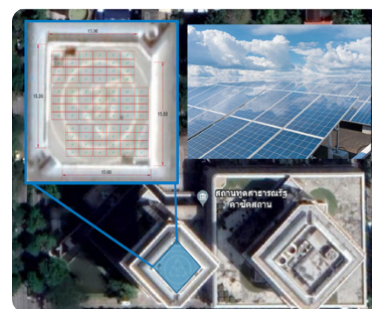
- **Water Consumption Reduction:** Abdulrahim Place has improved its sanitary wares, and installed water-saving faucets. This has resulted in saving 615 units of water per year, equivalent to 10,455 baht per annum.
- **Cutting-down Energy Consumption:** The building has installed additional small cooling system for cooling input during off-hours in order to consume less energy. This was done by using refrigerants unharmed to the atmosphere. For the lighting system, light bulbs have been replaced with T5 type bulbs, which can greatly reduce energy consumption, enabling the building to save the energy of 677,550 KWH, representing 3,048,975 baht per year.
- **Carbon Footprint Reduction:** The building has provided a clear separation area for each type of wastes. In 2022, 66,723 kilograms of recyclable wastes were stored in the building, making it decreased GHG emissions by 35,621 kgCO<sub>2</sub>e. In addition, the hazardous and infectious wastes have been separately collected so as to compile such garbage before notifying the government agencies to collect and destroy it every week.
- **Indoor Environmental Quality Inspection:** The building has conducted the annual air and water quality audits to ensure the tenants' safety and health.
- **Location and Travel:** The building has provided "MovMi" electric vehicle transportation to the nearby areas, connecting to the mass transit systems and electric vehicle (EV) charging stations. This helps reduce the use of private cars and preserve the environment.

- The building has a plan to create an application and a payment system via QR Code and e-Payment to reduce contacts and use of papers.

**GPF Wireless Building** ((with LEED Gold certification):

In addition to operating in the same actions as the aforementioned Abdulrahim Place Building, GPF Wireless Building has also planned to install solar panels (Solar Roof) in order to supply the generated electricity for using within the building as well as to reduce GHG emissions. It is expected to save electricity by 66,800 kWh, accountable for 300,600 baht per year, and reduce GHG emissions by 15,600 kgCO<sub>2</sub>e per annum.

**Bangkok City Tower** (in the process of applying for LEED certification): The tower has planned to install a wastewater treatment system, and reuse it for cooling the air conditioning system. This can save 13,200 units of water per year, equivalent to 224,400 baht annually.



In addition to managing the office buildings with care for the environment, GPF has also attached high importance to helping society and non-profit organizations by dividing the spaces of these three buildings for these organizations to arrange activities to raise money. There were 28 charitable organizations conducting activities to raise funds on the areas allocated by the three buildings. The amount received from donations was 287,203 baht. In addition, the Thai Red Cross Society organized the blood donation activities of which 363 blood donors donated a total of 163,350 CC of bloods.

## Green Office

GPF has emphasized on operating its investments with responsibility and taking into account the sustainability of the environment, society and governance. The Fund plans to reduce unnecessary paper use as well as decrease carbon footprints, which are part of the greenhouse gases. Over the past several years, GPF has developed and improved

its operations, including member services by trying to design various working processes by reducing or not using papers (Paperless) as follows:

**1) Members receiving electronic billing statements (e-Statement):** Since 2017 until now, GPF has encouraged and promoted its members to receive the annual GPF membership statements electronically instead of receiving paper statements. In 2022, more than 430,000 members received the e-Statements, enabling the Fund to decrease paper use by about 2,150,000 sheets per year.

**GO PAPERLESS.  
GO GREEN.**





2) **Members submitting personal information via electronic system:** Since 2018, GPF has encouraged and motivated its members to submit personal information through the “My GPF Application” system, which is GPF’s mobile application (Mobile App). At present, more than 78,000 members have used this Mobile App channel to provide their personal information, reducing the use of paper by approximately 78,000 sheets.



### Case Study: Energy Saving Policy and Measures at Holiday Inn Resort Phuket Hotel Invested by GPF

Holiday Inn Resort Phuket has announced a clear policy to save water and energy, reduce carbon footprints and GHG emissions, as well as increase employee awareness of sustainable operations without compromising the guest comforts. The following activities are examples to save energy for costs reduction carried out by the hotel.

#### Housekeeping Department

- Opening the curtains to let natural sunlight in during cleaning.
- Setting the air conditioner temperatures at 25 degrees Celsius.
- Implementing a campaign to persuade guests to reuse towels.
- Closing the blackout curtains to reduce outside heat.

#### Customer Service Department

- Issuing only one (1) key card (instead of 2 cards)
- Turning off the computer when not in use during the night shift.

#### Technician Department

- Running the steam generator (boiler) during 5.00-23.00 hrs.
- Increasing the cold-water temperatures by two (2) degrees Celsius to save energy.
- Installing a motion sensor to control electricity and lighting.
- Using LED spotlights instead of Halogen.

#### Kitchen Department

- Sorting ingredients in the refrigerator and adjusting the temperatures to an appropriate level.
- Opening the freezer only when necessary.
- Weekly defrosting.



## Infrastructure Investments

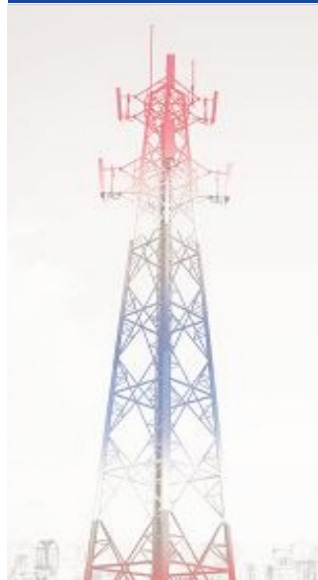
GPF has applied ESG factors to its investments analysis and decision-making processes for investing in infrastructure funds based on data gained from the questionnaires, conducted with the fund managers. These include establishing the inspection and screening processes as well as monitoring the performances of external fund managers on a quarterly and annual basis to ensure that the infrastructure funds invested by GPF have good governance, able to allocate sustainable returns to unitholders. Currently, GPF has invested in both infrastructure and transport infrastructure, including digital. Here are some examples:

### Investment in Thailand Future Infrastructure Fund (TFFIF)

	<p><b>Registered Capital:</b> <b>45,700</b> million baht (as of 26 October 2018)</p>	<p><b>Policy:</b> The Fund's initial investment property is the right to receive 45 percent of the total net toll revenue collected from the Chalong Rat Expressway and the Burapha Withi Expressway for a period of 30 years.</p>
<p><b>Highlights:</b> The ability to handle increasing traffic volumes. This was partly due to an increase in passenger traffics at Suvarnabhumi International Airport, and the government's Eastern Economic Corridor (EEC) development plan.</p>		<p><b>Investment Unit Value</b> as of 30 September 2022: <b>7.45 baht</b></p>

## Investment in Digital Telecommunications Infrastructure Fund (DIF)

Fund Type: Infrastructure Fund



Project Investment Amount:

**58,080** million baht (as of 23 December 2013),  
which is the largest infrastructure fund in Thailand.

**Policy:** Assets initially invested by the fund are telecommunication infrastructure assets. The fund procures benefits from the telecom infrastructure assets by earning net income.

**Highlights:**

Stable long-term returns.

**Dividend Payment History:**  
**34** times totaling  
**8.4724** baht per unit.

**Investment Unit Value**  
as of 30 September 2022:  
**16.6059** baht



# Investing to Support Sustainable Development Goals (SDGs)

GPF is committed to making an investment supporting the Sustainable Development Goals (SDGs), particularly Goal No. 11 (Sustainable Cities and Communities), Goal No. 12 (Sustainable Consumption and Production), and Goal No.13 (Tackling Climate Change) because the Fund has long-term investments in real estate and infrastructure through direct investments and mutual funds, contributed to the three SDGs as follows:



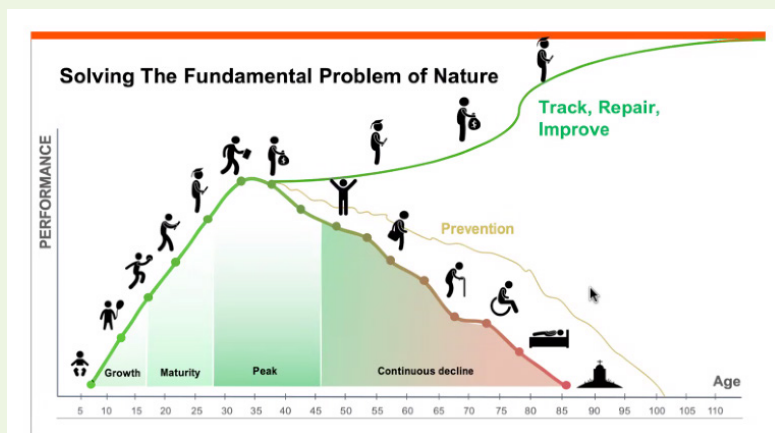
**1. Infrastructures and Properties:** As the infrastructures both expressways and digital communication networks have played an important role in the city and community development, investments in this asset group will help support SDGs No.11. Meanwhile, GPF's investments in real estate and office building management, focus on environmentally- friendly operations, such as GHG emissions. Therefore, such investments contribute to the SDGs No.13

**2. Sustainability Bonds:** These green bonds are linked to the implementation of environmental projects, and contribute to climate change (Goal No.13). While, the investment in debt instruments promoting the private enterprises' sustainability is relating to responsible business practices (Goal No.12). In addition, the public transport sustainability bonds are also used for developing the clean transportation, which contributes to the city and community sustainable development (Goal No.11). Because part of the money raised for the governmental sustainability bonds is used for the project helping, healing, and alleviating sufferings of those affected by the COVID-19 epidemic, it is considered as a social project. At the same time, another part of the funds raised from this sustainability bond is used for the MRT Orange Line Project, Thailand Cultural Center - Min Buri (Suwinthawong) section, which is classified as an environmental project, in the category of clean energy transportation. Therefore, investing in these sustainability bonds simultaneously contributes to SDGs No. 11, and No. 13.



Meanwhile, GPF has also promoted the SDGs through creating an engagement with businesses, in which the Fund has invested as a responsible investor or “Active Citizen”, such as discussing ESG implementation issues under the topic of BCG economic model or the Bio-Circular-Green Economy (BCG), will simultaneously support SDGs No. 11, No.12, and No.13.

More importantly, GPF has also been pushing for other sustainable development goals, such as partnering with the Pension Fund Network to raise awareness about an aging society, and investing in infrastructures and health supports, which uphold SDGs No. 3 (Health and Wellbeing), and No. 8 (Decent Work, Growing Economy), etc.





## Outcomes, Developments, and Challenges on ESG Investment in the Future

GPF's commitments to managing the investments professionally, and its adherences to ethical investment principles based on transparency, as well as its attachment to environmental, social and governance (ESG) guidelines to create a “sustainable investment ecosystem” according to the vision of being the “Thai pension fund with world-class standards”, has led to ESG related outcomes as following:



### GHG Emissions Generated by Investment Portfolios

GPF acknowledges well that climate change is an urgent global agenda. The Fund, therefore, has begun applying “The Task Force on Climate-Related Financial Disclosures (TCFD)” practices to its investment portfolios. The GHG emissions under Scope 1 (Direct Greenhouse Gas Emissions) and Scope 2 (Indirect Greenhouse Gas Emissions, e.g. from electricity consumption) have been assessed for domestic and international equity investment portfolios. Two (2) indicators were calculated according to the Partnership for Carbon Accounting Financials (PCAF) standard as follows:

1) The amount of GHG emissions based on the proportion of ownerships in the business (Apportioned Carbon Emission) or carbon footprints from holding shares in companies emitting GHGs from their business operations. As such, the amount of GHG emissions is calculated based on shareholding value proportion to the company's value. This indicator is reported as the equivalent of carbon dioxide emissions (CO<sub>2</sub> equivalent).

2) Weighted Average Carbon Intensity (WACI): This indicator is calculated by assessing the intensity of carbon footprints in the investment portfolios proportionally. WACI will report the amount of CO<sub>2</sub> emissions equivalent to a one million-baht investment. This indicates that investment portfolio is very carbon intensive.

From the carbon footprint calculation, it was found that the domestic equities portfolios, both invested by GPF and those invested through external fund managers, released GHG emissions around 1/4 lower than the benchmark (SET50 index). Meanwhile, the global equity portfolio GPF has employed external managers to manage, emitted GHG about 14,000 tonnes higher than the comparator. However, the WACI index indicates that GPF's investment allocation makes the overall equity portfolio have a carbon footprint intensity lower than the benchmark. This is partly due to its responsible and sustainable investment processes, incorporating ESG factors into an investment decision-making process.

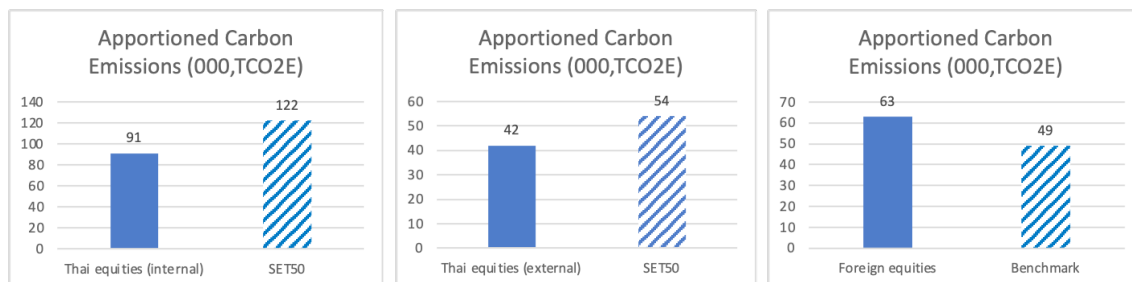


Figure 16.1 – GHG Emissions of Equity Investment Portfolios



Figure 16.2 – GHG Emissions of Equity Investment Portfolios

Source: S&P CIQ calculated by GPF



## Collaborating with Global Organizations to Promote ESG Investment

Collaborating with international organizations is part of helping drive GPF to invest responsibly, by creating partnership with organizations, namely the United Nations, World Bank, United Nations Development Program (UNDP), Organization for Economic Cooperation and Development (OECD), and PRI, etc.



As a part in moving towards the “Sustainable Development Goals” (SDGs), GPF is committed to creating the responsible investments, and continually contributing to the sustainable development internationally, by carrying out following significant activities:



- GPF, representing Thai institutional investors, together with representatives from private sectors and Thai banks attended a meeting with the “United Nations and the Global Compact Network Thailand” (GCNT) to create networks and set guidelines for building cooperation between Thai institutional investors, private sector, Thai banks, and the United Nations in order to drive the sustainable development in Thailand to be materialized.

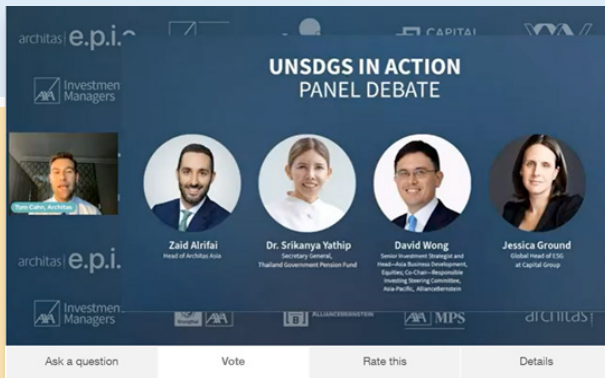




- GPF participated in the “United Nations Forum on Responsible Business and Human Rights Scaling up Business Action for Net-Zero: Harnessing the Levers of Change”, organized by the United Nations. In order to expand investment operations focusing on climate change, GPF has given the highest priority to investing in companies setting a goal to reduce GHG emissions.



- GPF participated in the “Sustainable Financing Meeting: Importance of the Institutional Investors Demand for Sustainability-related Financial Products and Challenges in Scaling Up in Thailand” organized by the United Nations. GPF has helped drive projects friendly to the environment through investing in ESG bonds. Throughout the past period, the amount of GPF’s investments in ESG Bonds has continued to increase.



- GPF joined the seminar topic “Architas Asia Responsible Investing Forum: UNSDGs in action”, emphasizing on responsible investment and highlighting the investments supporting the United Nations Sustainable Development Goals (SDGs No. 11, 12, 13).



- GPF attended the “PPI’s Asia Pacific Roundtable in Singapore” seminar held under the topic of “Sustainability and Social Stewardship in South East Asia, and participate in the “Pacific Pension & Investment Institute (PPI). The Fund has also created partnerships with a global pension fund network to drive responsible investments, and shared experiences in moving towards the responsible investments. GPF focuses on meeting and discussing with executives of invested companies regularly, regarding ESG factors leading to a business sustainable development (Positive Engagement).



- GPF, in collaboration with the United Nations (UN), and the Securities and Exchange Commission (SEC) organized the event on the topic of “Sustainable Thailand 2022: “Moving from Ambition to Action towards a Greener Financial System”, with an aim to promote best practices relating to responsible and sustainable financial practices, as well as to exchange experiences, successes, and challenges of various organizations in order to increase capabilities of financial, banking, and investment systems for the nation’s sustainability. This included a follow-up on the operation progress of government agencies, institutional investors, and banking businesses having signed a declaration of intent to drive Thailand towards the responsible and sustainable financial practices in 2021.

## ESG Related Challenges in the Future

Although ESG issues have received high attention from all sectors with collaborations created all over the world, to make the ESG practices materialized, GPF sees that ESG factors are still challenging in the near future.



- According to the World Economic Forum’s report, **tackling climate change** is the most significant risk and challenge, which requires both mitigation and adaptation. As the GHG emissions reduction is a key mitigation measure, the investment in technology coupled with the development of climate-resilient infrastructures, are essential. Therefore, supporting “Climate Finance” is inevitable for a transition to “Net Zero”.
- **Developing ESG Data Ecosystems** is a critical component to drive ESG investments. A development of ESG data ecosystems includes monitoring, reporting, and reviewing the ESG data undertaken by all sectors involved, whether they are the business sector, the government agency, or the overseer. These actions will be more important, especially assessing the ESG performance against the “Net Zero” goals since the measurement methodologies and standards, as well as data reporting formats are still diverse.
- **Regulatory changes** of both domestic and international regulatory agencies that have integrated ESG factors into applicable regulations. The regulatory change will be the pressures and impetus for creating changes in business operations and investments to be more sustainable.







## GPF Actions to Drive ESG Attributions in the Future

GPF is committed to developing the responsible and sustainable investments. The Fund intends to enhance ESG performances of the firms it has invested in through discussions with domestic companies, where GPF has managed investments by itself, and by the fund managers assigned to invest on behalf of GPF. In addition, GPF will increase its investments in assets directly generating positive ESG impacts, such as the “Sustainability Bonds” or “ESG Bonds”. This doesn’t only show a strong intention to drive ESG investments, but also positively support Thailand’s environment, society and good governance. Furthermore, GPF will collaborate with World Bank to review and update the “ESG Score” having been in use for some time.



## In 2023, GPF plans to implement the responsible and sustainable investments as follows:

1. GPF aims to **create a positive engagement with public companies where it has invested and with external fund managers assigned** for investing on behalf of GPF: The objective is to exchange information and knowledge, encourage practical practices, and promote ESG operations, including ESG data disclosures. GPF has various methodologies to positively engage with public companies and external fund managers, such as designing the ESG questionnaires, following up on data with the Investor Relations Department or Relationship Manager, and officially meeting with involved executives.

2. **Continuously expanding investments in sustainability debt instruments** from current holdings of approximately 40 billion baht: This is to make such assets hold by GPF grown in line with the growth rate of domestic ESG Bond market, and to convince fundraisers to issue more types of sustainability related debt instruments.

3. **Reviewing the “ESG Score” developed in collaboration with World Bank** (GPF-ESG Weights and Scores: Asset Valuation Methodology©) in 2020 to be up to date: After having integrated the “GPF-ESG Weights and Scores: Asset Valuation Methodology©” into its investment processes for quite some time, GPF will study this “ESG Score” tool in comparison with other more widely used ESG scoring systems.





GPF has placed great importance on driving towards sustainable operations in a concrete way. The Fund, therefore, is committed to being a leader and innovator in the field of ESG investments in Thailand. It also intends to create collaborations on responsible investments or “ESG Collaborative Engagement” since GPF is well aware that making ESG investments to have positive impacts requires all sectors in a sustainable investment ecosystem to join forces.









## **GOVERNMENT PENSION FUND**

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