

Using Innovative Policy and Regulatory Approaches to Incentivize the Alignment of Investment Strategies with Sustainability Considerations

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As CEO, Jessica is responsible for overseeing, directing and implementing the strategic plan and activities of the organization. ASrIA is a not-for-profit membership association dedicated to promoting sustainable finance and responsible investment across the Asia Pacific, through building market capacity, providing advocacy for the financial industry and undertaking research projects and authoring publications. In addition to managing operations, resources and finances, Jessica is responsible for directing all project and research initiatives, overseeing ASrIA's advocacy and engagement activities, and managing relationships with members, sponsors, the industry and other stakeholders. Her role also involves providing thought leadership on industry issues, with regular contributions to the media and speaking engagements.

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1.0 Introduction

The gap between the level of capital investment required and the actual level of investment made to transition to a sustainable, climate-resilient and resource-efficient economy is vast. This investment gap is causing countries to miss significant opportunities to realize sustainability-related value, particularly through leveraging private sector capital.

However, the deployment of private sector capital is not happening fast enough and it is increasingly recognized that policy and regulatory intervention is required. The current institutional rules and norms governing the investment industry are no longer sufficient and have failed to ensure that the capital markets are effective and efficient in the allocation and management of public goods and finite resources.

In part, this is a market failure whereby risk-adjusted return profiles over reasonable time horizons are either inaccurate or are not being fully identified or understood. It is also a public policy failure whereby externalities—defined as being non-accounted costs and benefits to society—are not being accurately reflected in market prices. Until strong and visible prices that incorporate these externalities are in place, the risk-adjusted return profile for sustainable, resource-efficient and long-term investments is likely to remain unattractive to the private sector.

The aim of this paper is to provide input on how governments can incentivize the investment industry to rapidly expand and scale-up investment in sustainable and green growth opportunities, as part of their broader agendas on transitioning to climate-resilient and resource-efficient economies. Through financial market reform, policy-makers and regulators have the opportunity to create certain domestic enabling conditions that can incentivize private sector participation in providing the capital required to finance such a transition. This has particular relevance to many countries in Asia, whereby financial market reform is under way and policy-makers are actively seeking tools and mechanisms to support this.

The specific objectives of the paper are to:

- Summarize the types of incentives and mechanisms that can facilitate and support the investment industry in incorporating sustainability considerations into their investment strategies and decision-making processes.
- Identify different policy and regulatory approaches—currently in place, being developed or being considered in different countries—that are intended to create or enhance these types of incentives.
- Briefly assess these case studies and examples in terms of effectiveness, strengths, weaknesses and challenges.
- Make conclusions about the opportunities and challenges facing policy-makers and regulators in developing and implementing an effective and coherent investment policy framework that delivers long-term financial viability and predictability, and supports sustainable and green growth.

1.1. Scope and Definitions

Defining the “Investment Industry”

The focus of the paper is on those market participants who are primarily responsible for mobilizing and leveraging private capital and their related financing initiatives. For the purpose of this paper, the investment industry is taken to include:

Institutional investors:

- Asset owners, including private and public pension funds, insurance companies, sovereign wealth funds and endowments
- Asset managers, fund managers and investment advisors

Private sector financial intermediaries:

- Banks (which offer asset management services, lending and project financing)
- Private equity firms
- Venture capital funds

Defining “Sustainability Considerations” Within the Context of Investment Strategies

The term “sustainability” is born of the concept of sustainable development, meeting present needs without compromising the ability of future generations to meet their needs (World Commission on Environment and Development, 1987). In its broadest sense, it encompasses protection of the environment, social welfare, efficient use of natural resources and economic well-being (Krosinsky & Robins, Ed., 2008) and therefore, by definition, requires a medium- to long-term perspective.

More specifically, sustainable investing can be defined as being “an investment approach making reference to environmental, social and governance (ESG) factors in the selection and management of investments” (Global Sustainable Investment Review, 2012). While no definitive list of environmental, social and governance (ESG) issues exists, several characteristics are common when an investor is applying ESG criteria to analyze corporate behaviour. Such characteristics will include one or more of the following:

- Considering risks and issues that have traditionally been considered non-financial or non-material.
- Using a long-term horizon when making portfolio selection and management decisions.
- Including externalities that are not captured by market mechanisms, thereby internalizing all costs, risks and opportunities.

The paper focuses on the investment strategies employed by the different actors in the investment industry and how these actors can be incentivized to incorporate sustainability at the various stages of the investment decision-making process. Historically, a “balanced” investment strategy, while centred on the risk-return trade-off, has not incorporated sustainability-related risks, impacts, values or returns. Sustainability considerations refer to those risks, impacts, values and returns and include ESG integration as part of the assessment process. In particular, this paper identifies many examples and developments that specifically target environmental and climate change issues and challenges, bringing to light the importance of these issues within the context of sustainable finance more broadly. When referring to sustainability considerations, this paper assumes that, for example, green growth, environmental finance and climate adaptation needs are included.

Defining “Policy and Regulatory Approaches” for Incentivizing the Investment Industry

While the moral imperative to include sustainability considerations within investment strategies plays a part, there are other imperatives that also come into play. From the investor perspective, these include the risk of not acting and therefore the risk to the business and investor returns, in addition to the positive returns from factoring sustainability opportunities into current investment approaches.

Policy-makers and regulators play a critical role in providing an appropriate and effective framework to incentivize sustainable and green investment, which consists of five elements, all of which have the potential to influence investment conditions (refer to diagram below).

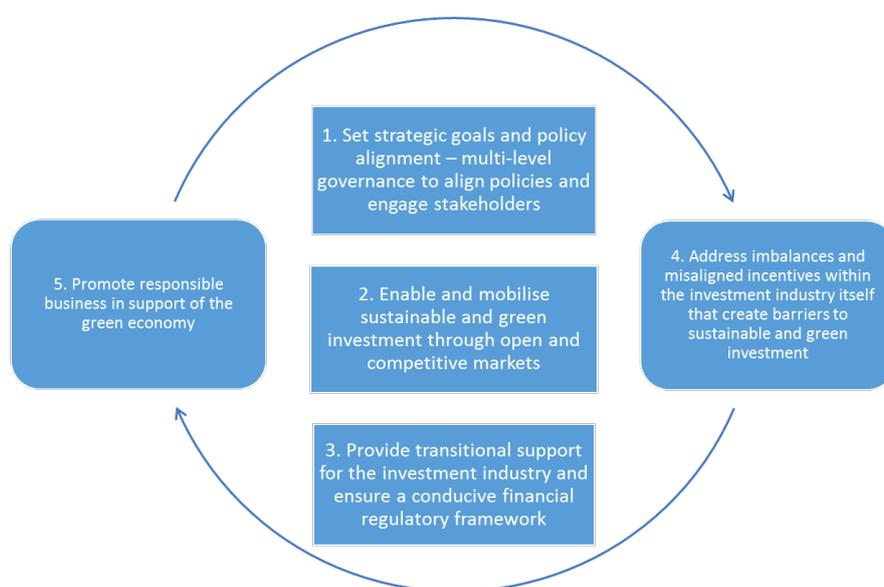


FIGURE 1: TOWARDS A POLICY FRAMEWORK FOR SUSTAINABLE INVESTMENT AND FINANCE

Source: Adapted from Corfee-Morlot et al. (2012).

The paper will focus on policy elements 2, 3 and 4 in Figure 1, as defined here:

1. Element 2: Enable and mobilize sustainable and green investment through open and competitive markets:
 - Create an external and enabling environment in which the investment industry is encouraged to operate with greater alignment to long-term sustainability goals and penalized when it does not.
 - This includes implementing appropriate fiscal and investment policies, ensuring transparency and disclosure, providing market incentives such as putting a price on carbon and addressing other investment barriers.

2. Element 3: Provide transitional support for the investment industry and ensure a financial regulatory framework that is conducive for sustainable and green investment:
 - Establish specific policies, regulations, tools and instruments to create a market transition and support the industry in focusing on long-term sustainable investment within investment strategies.
 - This includes innovative financial mechanisms to reduce risk and/or increase market liquidity, aligning the pension industry and working with other actors in the financial ecosystem such as in rating agencies and stock exchanges.
3. Element 4: Address imbalances and disincentives within the investment industry that create barriers to sustainable and green investment:
 - Introduce policies, regulations and requirements that specifically build capacity and target internal workings of the financial institution and behaviour of the investment professional.
 - This includes policies on key issues such as remuneration and incentive structures, the concept of stewardship for the investor and the nature of corporate reporting.

Individually, each element plays a role in incentivizing change and shifting private sector investment at scale. However, they are also interdependent and require a dynamic approach to policy and regulatory intervention.

1.2 Limitations of the Paper

The paper focuses on relevant examples and case studies that are aligned with the policy elements above. However, this analysis is not exhaustive. Certain areas, issues and policies are not covered in detail, including: the changing scope of fiduciary responsibilities, active ownership, insurance and reinsurance products, leveraging foreign direct investment, natural capital accounting, use of government subsidies and policy implications of the growing dialogue on stranded assets.

The terminology used and definitions applied to sustainable investing can often be blurred and are subject to interpretation. As part of this dialogue, the term “socially responsible investing” (SRI) has been frequently used. SRI refers to the application of certain investment strategies, such as negative or exclusionary screening, whereby socially and ethically orientated criteria are applied. While relevant to the broader discussion on sustainable investing, SRI is not specifically referred to in this paper.

Development banks, public institutions and the retail investment industry—representing those individuals who invest or save on their own behalf—are not included in the scope of the paper on the basis that different types of policy and regulatory mechanisms would be required and therefore additional analysis would be needed. Public pension funds and sovereign wealth funds are included in the broader scope of the paper because both represent a class of their own, in that the capital employed is effectively private in its nature and objectives, but investment decisions are often social and public policy driven. However, given their large size, in terms of assets under management and dominating role in the financial markets, a detailed analysis of relevant incentives within the policy and regulatory framework is not included.

Examples and issues are considered on a global basis, with no focus given to a specific region or country. The paper does not cover what many of these would mean in the context of a specific country or in Asia, as this would be part of a follow up study.

Finally, as much of the debate and dialogue on the issues raised in the paper are current, there is limited empirical evidence and quantitative data as to the effectiveness or impact that certain policy or regulations can have on the investment industry. At this point, in many instances it is only possible to observe certain trends as opposed to identifying specific policy outcomes, and often only at the initial stages of implementation. Furthermore, in certain cases specific policies and/or regulations are yet to be designed.

2.0 Defining the Problem: Incentivizing Change in the Investment Industry

The investment industry is highly heterogeneous. As a collective, such investors hold a massive proportion of global assets—in 2011, it was estimated that this stood at well over US\$85 trillion (Organisation for Economic Co-operation and Development [OECD], 2013). While most are active and present in developed markets, it is expected that over the coming decade emerging market investors will rapidly expand in both scale and influence.

Given the size of assets under management, the behaviour of the investment industry is critical to global capital allocation and the direction of economic development and growth. Its role in bringing transformational change to the financial ecosystem is obvious, and yet it remains out of step with the urgent need to build sustainable, low-carbon green economies. The challenge is how to incentivize the investment industry so that it is no longer out of step with global needs.

2.1 Investment Strategies and the Sustainability Challenge

Within the investment industry itself, concern is growing, particularly in relation to climate change and its impact on portfolio values. This was clearly articulated in the Global Investor Statement on Climate Change (Global Investor Coalition on Climate Change, 2010) made on behalf of over 250 investors—asset owners and asset managers—collectively representing assets of over US\$15 trillion. It stated:

Investors are concerned with the risks presented by climate change to regional and global economies and to individual assets. At the same time, investors are interested in the large potential economic opportunities that the transition to a low-carbon economy presents. Investors have a fiduciary responsibility that requires them to seek optimal risk-adjusted returns on their investments.

At present, in the absence of strong and stable policy frameworks, many low-carbon investment opportunities do not currently pass this test. Private investment will only flow at the scale and pace necessary if it is supported by clear, credible, and long-term policy frameworks that shift the risk-reward balance in favour of less carbon-intensive investment.

However, the consideration of non-financial aspects when making capital allocation decisions is still discarded by the majority of the investment industry. This section answers the following questions: Why is this the case? What are the major issues affecting the market's behaviour? How can this analysis inform potential policy and regulatory responses?

- 1. Short-termism is endemic within the investment industry and negatively affects long-term sustainability-aligned investment strategies.**
 - “Short-termism” and “myopia” are terms that have been used to describe decisions in which firms pursue short-term gains at the expense of long-term strategies. As a consequence, short-termism promotes a tendency to overvalue short-term rewards, invariably leading to an undervaluation of long-term consequences (Laverty, 2004).
 - Short-termism is primarily associated with hedge funds using speculative short-holding strategies. However, other investors, including pension funds (which traditionally invest with a long-term time horizon) also commit a part of their portfolio to hedge funds and high turnover managers.
 - Short-termism in the financial markets is not akin to short-term investment strategies, which provide liquidity to the market. Rather, scholars define investor short-termism as “a mis-discounting of long-term cost, externalities and cash flows. Basically, short-termism emanates from the difficulty to evaluate long-term cash flows” (Essid & Zadek, 2011).

- While the debate on short-termism in the capital markets is not new, in the context of addressing the challenges of sustainability, it is highly relevant. Haldane and Davies (2011) highlighted this when exploring the issue of short-termism drawing on equity market experience. They argue that short-termism “is both statistically and economically significant in capital markets,” leading to adverse implications on long-term investment decisions—in essence, a “capital market failure” that requires a public policy response (Haldane & Davies, 2011, p. 1).
 - This capital market failure has led to distortions within the market that have resulted in a systemic bias towards rewarding short-term rewards. Long-term value is not fully understood because long-term costs (including externalities) and cash flows have been inaccurately discounted. The behaviour of investment managers has responded accordingly resulting in a lack of investor action towards incorporating sustainability risks and opportunities into the investment strategy or decision-making process. Dealing with short-termism in capital markets at source, through policy and regulation, will make significant strides towards incentivizing long-term sustainable investment behaviour.
- 2. Dialogue on sustainability and ESG integration does not occur within the mainstream investment industry and is often perceived as being a stand-alone investment strategy that focuses on a niche market, theme and/or client.**

The proportion of assets managed with reference to ESG considerations are expected to rise as the relevance of these issues become more apparent and an increasing number of investors realize the importance of sustainable investment to risk management and long-term performance. However, the investment industry appears reluctant to define sustainability within the context of mainstream investment strategies.

The Global Sustainable Investment Alliance Review (2012) found that at least US\$13.6 trillion worth of professionally managed assets incorporate ESG concerns, representing 21.8 per cent of total assets. Therefore, it is clear that the sustainable investment industry has significant scale in the global arena. However, the review also found that the most common strategy used globally is negative/exclusionary screening,¹ which is applied to US\$8.3 trillion of the total US\$ 13.6 trillion.

While negative screening is relevant, it does not represent the inclusion of sustainability considerations into mainstream investing, in part because exclusions made are often highly selective and do not require full integration of ESG criteria. Furthermore, it does not drive capital allocation decisions in favour of sustainable and green growth opportunities.

Lack of mainstream dialogue is again related to the issue of short-termism, because there is no framework or motivation that requires mainstream investors to take a long-term perspective when undertaking investment analysis. The issue is also compounded by the complexity of the challenge, as the investment industry grapples to define and therefore understand sustainability and the risks and opportunities arising from sustainable investment, often resulting in avoidance.

Short-termism is also related to the problem of “market fundamentalism”; according to Generation Investment Management (2012): “an engrained fear of alternatives to currently prevailing approaches to capitalism plagues investors, and a complacent inertia persists among a majority of people who are waiting to be convinced of the opportunities that Sustainable Capitalism presents” (p. 13).

¹ Negative screening is the exclusion of a fund or portfolio of certain sectors, companies or practices based on specific ESG criteria.

3. In general, the investment industry does not understand how to price the risks associated with many sustainable investments, so it holds the misperception that return profiles of such investments do not deliver positive financial returns.

The nature of the risks that are associated with many sustainability-aligned investments are often non-financial and long-term, considered non-material at the point in time of the investment decision. Again, this is closely linked to public policy failure in providing transparent price signals for finite resources such as carbon and water. This market failure has allowed a systemic bias towards short-termism to dominate decision-making and ultimately ignore risks and values that go beyond the time frame of either the portfolio or the tenure of the manager.

Latham and Braun (2010) study the investment manager's dilemma of making decisions to build long-term competitive advantage versus meeting short-term performance expectations imposed by capital markets, knowing that managers are risk averse whenever faced with uncertainty and ambiguity. This dilemma is particularly relevant to sustainable investment opportunities where the risk analysis will look at policy, regulatory, commercial and technological risks—for example, in renewable energy development in solar or wind. The uncertainty and ambiguity associated with these risks present formidable barriers to investment.

However, asset manager RCM's analysis of the performance from 2006–2010 of stocks on the MSCI World, MSCI Europe and MSCI U.S. indices found that investors' portfolios are not negatively affected by the use of sustainability criteria in stock selection. There is also a probability of outperformance over the longer term. Investors could have added 1.6 per cent a year to their investment returns by allocating to portfolios that invest in companies with above-average sustainability ratings (Tonello, 2013). The challenge is to demonstrate to mainstream investors that this is the case.

Integration of ESG criteria goes partway to supporting better understanding of sustainability risks. However, by not making rapid progress in this, investors are making ill-informed decisions now that will have an impact on values in the medium to long term. For example, a study of some of the world's largest pension funds, with a total of US\$2 trillion in assets under management, concluded that climate change could contribute as much as 10 per cent to portfolio risk over the next 20 years (Mercer Consulting, 2011). Assets that are inconsistent with a sustainable economy risk reduced returns.

4. There is a lack of expertise and capability in the investment industry, compounded by poor quality data and information.

Many investment professionals do not have the knowledge and expertise needed to ensure that their decisions are consistent with long-term sustainability objectives. The lack of competencies sits across asset management firms, asset owners and the business leaders of the companies in which they invest (Generation Investment Management, 2012).

There is also a disconnect between how investors and companies view the centrality and materiality of sustainability issues on long-term business performance. While 93 per cent of global chief executive officers (CEOs) see sustainability as important to their company's future success (Accenture, 2010) and 49 per cent of chief financial officers see a "significant" link between sustainability performance and finance performance (Deloitte, 2012b), only 12 per cent of CEOs say pressure from investors drove them to take action on sustainability issues (Accenture, 2010).

This disconnect is accentuated by the lack of tools and resources, such as benchmarks that can be consistently applied across the industry. Where tools and approaches do exist—such as negative screening, best-in-class analysis, compliance and risk monitoring, engagement and integration—often these are perceived as being for specific sectors or portfolios only, and not applied across all asset classes. Furthermore, greater data depth, breadth and quality are required, particularly where much of the data currently used are retrospective and historical.

Understanding exposure to greenhouse gas (GHG) emissions across investment portfolios is an example of where limited expertise and capability exists. In the recent Global Investor Survey on Climate Change (Global Investor Coalition on Climate Change, 2013), only 26 per cent of asset owners and 30 per cent of asset managers participating in the survey have conducted formal assessments of their exposure to emissions intensive investments. The survey identified that the key challenges faced by investors were:

- Limited data (particularly for fixed interest investments)
- Patchy carbon pricing signals
- Inadequate company disclosures
- Limited resources (particularly for asset owners)
- Lack of clarity on which investment should be measured

The current models of investment are not working—the endemic issue of short-termism structurally embedded within the industry itself is preventing the wholesale change required. However, this is also held back because there are no regulatory requirements for the industry to measure and manage sustainability risks, it does not have the requisite expertise or capability to do so. The tools and mechanisms required to support this change are severely lacking.

3.0 International Policy and Regulatory Innovations

If shifting the institutional rules and norms of the investment industry is the challenge, what are the means for achieving such change, specifically to secure greater alignment with long-term sustainability goals? Public policy and regulatory responses can and must cover issues related to transparency, governance, contract design and taxation/subsidies (Haldane & Davies, 2011).

While this shift can and must be addressed through providing direct incentives and structures for the investment industry, the following case studies and examples illustrate that there are broader, softer tools and instruments available to policy-makers and regulators. In reality, there are very few tried and tested policies that focus on investor incentives with a direct feed into investment strategies. Many effective policies and regulations are broader in scope and impact.

3.1 Policy Focus: To enable and mobilize sustainable and green investment through open and competitive markets

In order to incentivize the investment industry, policy-makers and regulators must create an external and enabling environment in which the investment industry is encouraged to operate with greater alignment to long-term sustainability goals and penalized when it does not.

This system must include implementing appropriate fiscal and investment policies, ensuring transparency and disclosure, providing market incentives such as putting a price on carbon and addressing other investment barriers.

3.1.1 From Policy to Policy Finance

Domestic policy is the key determinant of whether and under what conditions investors deploy their capital (Sullivan, 2011). Creating an enabling and incentivizing environment in which the investment industry can operate also requires a stable and consistent policy framework that is comprehensive and integrated. Policy uncertainty is considered one of the greatest (and often unquantifiable) risks from the investor perspective. The countries that have attracted the most investment in low-carbon growth (such as the U.K. and Germany) are those that have provided long-term certainty around the structure and incentives associated with these investments.

BOX 1. INDIA'S CLIMATE CHANGE AND CLEAN ENERGY POLICY FRAMEWORK

In 2008, the Government of India published the National Action Plan on Climate Change—the country's first strategy on climate change. Subsequent to this, the government has set a number of targets, including reducing carbon dioxide emissions per unit of gross domestic product, increasing the proportion of electricity from renewable energy sources, in particular solar and biofuels, and setting tighter energy-efficiency measures.

In conjunction with developing a regulatory and policy framework on climate change, the government has also focused on boosting financial provisions. For example, a Clean Energy Fund has been established with additional funds proposed to support energy-efficiency measures—a fund that gives partial risk guarantees and a venture capital fund to invest in innovative efficiency technologies.

Historically, the lack of a clear policy framework on climate change has been a major barrier to incentivizing private sector investment in India. Evidence shows that this clarity on policies is having a positive effect on the investment industry with renewable energy investment growing by 25 per cent in 2010 alone (Sullivan, 2011). The framework is considered comprehensive in terms of its breadth of coverage but also focused on financial aspects of policy, which increases investor confidence.

However, the policy framework is still in the process of being developed and many details remain missing. Many of the targets set are dependent on access to international finance and India remains focused on economic growth, with a heavy reliance on fossil fuels to fuel this growth. As a consequence, many investors are still focused on opportunities where immediate paybacks are more likely, even if that is at the expense of investments that provide better long-term returns (Sullivan, 2011).

3.1.2 The Use of Fiscal Incentives

Fiscal policies are an important driver of investor behaviour. Governments can use fiscal incentives and structures to encourage an investment horizon that favours long-term, sustainability-focused activity and discourages short-term behaviour through:

1. Imposing taxes that penalize short-term investments.
2. Providing tax exemptions that incentivize long-term investments.

Fiscal instruments such as capital gains tax or excise tax can be used to encourage long-term share ownership—for example, setting a capital gains tax that works on a descending scale depending on the number of years securities are held.

The Financial Transactions Tax (FTT)—a charge placed on a particular type of monetary transaction—has also been widely debated following the Global Financial Crisis as a means of encouraging more “responsible” behaviour by the financial industry.

BOX 2. THE EUROPEAN UNION'S FINANCIAL TRANSACTIONS TAX

In January 2013 the European Commission approved plans under “enhanced co-operation” rules to allow a smaller group within Europe to pioneer a form of the Financial Transactions Tax (FTT). Under the plan, the tax—also known as a Tobin tax after the economist who originally came up with it 40 years ago—is expected to be charged at a rate of 0.1 per cent of the value of any trade in shares or bonds, and 0.01 per cent of any financial derivative contract. The tax was introduced in Italy at the beginning of September 2013 and similar proposals are also being considered in the United States and Australia

The objective of the tax is to introduce levies against high-speed trading and equity derivatives in order to discourage this type of investing behaviour. As with other measures that discourage short-termism, the FTT can affect investor behaviour and incentivize the development of longer-term investment strategies; by their very nature, these strategies should incorporate an enhanced understanding of sustainability risks and related opportunities, including those posed by climate change.

There has been intense opposition to the European Commission proposal by pension funds, financial intermediaries, banks and exchanges. While it was approved by the European Parliament in June 2013, the tax has been weakened to lower the cost of trading in pension funds and for investors trading sovereign bonds and small-cap stocks.

Pension fund opposition focused on how the FTT could force investment managers to rebalance their portfolios, negatively affecting returns. Other critics, including Aviva Plc, supported this by arguing that the FTT would be damaging to long-term risk-averse investors. The European Commission responded by stating:

The impact of the proposed FTT will depend on the portfolio and the investment strategy. Buy and hold strategies will feel very little impact from the FTT, whereas the more aggressively managed pension funds will be taxed more. (Laja, 2013)

After an unusually strong legal objection by the EU Council on the grounds of the negative effects of non-participating members as well as the tax’s impact on existing EU treaties, the future and final implementation of the proposal remains unknown.

However, using fiscal incentives to encourage a change in behaviour in the investment industry faces many challenges, primarily in terms of acceptance, and is highly political in nature. The considerable industry opposition to the EU’s FTT illustrates this. It remains to be seen whether the EU’s FTT will affect investor behaviour and reduce flows of short-term transactions. Should the tax achieve this to any degree, it will not necessarily lead an investment behaviour that considers the long-term risks to the portfolio. It may result in more long-term investment strategies, but these may be uncorrelated to sustainability considerations.

Implementing a fiscal instrument for a specific purpose—in this case to incentivize or penalize a particularly investment behaviour—would require clarity on the use of the tax revenue raised. For example, the Indian government has implemented a tax of US\$1 per tonne of coal—raising up to US\$1.1 billion per annum—and this revenue has been channelled to fund research and innovative projects in clean energy technologies through the government’s Clean Energy Fund.

Ultimately, fiscal policies cannot be considered in a vacuum as they form part of a wider debate that touches on issues such as the use of government subsidies (particularly when supporting high-polluting and/or energy-intensive industries), growth in the practice of shadow banking, increased speculation and use of derivatives and leverage, lack of transparency and so on. Furthermore, as with all fiscal incentives, policy-makers cannot direct the type of responding behaviour nor the scale or impact of the policy. In order to be effective in incentivizing change, the fiscal environment needs to remain stable, with fiscal policies being consistent, both over time and across jurisdictions, and not subject to political short-termism.

3.1.3 Transparency, Disclosure and Reporting

In terms of enhanced disclosures by financial and non-financial companies on their long-term intentions, and in line with Haldane and Davies’s categorization, transparency is an important part of the incentive jigsaw and is likely to be one of the main drivers of change in Asia.

Transparency by companies allows investors to make more informed decisions. Transparency by investors allows stakeholders to push for and demand certain behaviours and strategies. Ultimately, disclosure requires investors and companies to behave in a transparent way in order to address the information asymmetry and support the functioning and liquidity of the markets. In relation to sustainability, transparency is important as it ensures that risks and opportunities are identified and communicated, and it allows the various stakeholders to use this information accordingly.

The Role of Stock Exchanges

Given the role that stock exchanges play in the capital markets, they are well positioned to require enhanced corporate disclosure on sustainability performance, particularly in terms of depth, consistency and comparability. Leading exchanges around the world have already implemented robust corporate education programs and sustainability-themed indexes, and set sustainability standards and ESG disclosure as a prerequisite for companies to list on the exchange. This is important for the investment industry to provide the impetus to compare and contrast investment opportunities, but also to perform to certain standards and expectations.

BOX 3. THE AUSTRALIAN SECURITIES EXCHANGE'S CORPORATE GOVERNANCE PRINCIPLES

The Australian Securities Exchange (2010) provides a useful case study. Through its Corporate Governance Principles, all listed companies are required to (among other things):

- Promote and make timely and balanced disclosures of all material matters concerning the company.
- Actively promote ethical and responsible decision making.
- Establish a sound system of risk oversight and management and internal control.

These principles attempt to create a market environment whereby due regard is given to the different stakeholders within that market, with a distinct emphasis on fairness, respect and responsibility. Overall, the principles go some way to creating an environment that supports long-term decision making and have been considered successful in increasing the level of transparency in the market.

Asian stock exchanges are getting a well-deserved reputation for supporting enhanced corporate disclosure and responsibility, with exchanges from Hong Kong to Malaysia to Thailand issuing environmental, social and governance guidelines to focus their listed issuers’ efforts in this regard.

The thorny issue remains whether standards should be voluntary or mandatory. Where voluntary, such as in Hong Kong, the investment community has already begun to question whether voluntary guidelines are sufficient for supporting truly sustainable outcomes. In the absence of mandating, can sustainability considerations really become integral to capital allocation decisions?

Even where mandatory sustainability reporting standards are in place, this is typically on a “comply or explain” basis. For example, listed companies in Malaysia are required to include in their annual reports a description of their corporate and social responsibility activities and practices or, if there are none, a statement to this effect. The Taiwan Stock Exchange takes a similar approach. Of course, enforcement remains an issue, with many Asian markets taking the approach of private reprimand letters in favour of public sanctions or fines.

Shareholder Activism

Solutions to systemic issues require a high-level of engagement from key actors, and shareholders—the investors themselves—have demonstrated that they can play a significant role in encouraging corporations to be more responsive to environmental and sustainability concerns.

Shareholder activism and advocacy is significant and growing. In the United States, between 2010 and the first half of 2012, more than 200 institutional investors and investment managers controlling at least US\$1.54 trillion in assets filed or co-filed shareholder resolutions on ESG issues. Regulation can be introduced to improve levels of shareholder activism as demonstrated in Box 4.

BOX 4. U.S. SECURITIES AND EXCHANGE COMMISSION

In the United States, under Securities and Exchange Commission (SEC) Rule 14a-8, a public company must include a shareholder’s proposal in its proxy materials. This was one of the original tools used by shareholders (largely institutional investors) to compel companies to give greater consideration to sustainability issues. From 2004, new SEC rules also required investment managers to disclose to clients their policies for voting proxies and their voting records, providing an additional level of transparency for asset owners.

The role of the SEC in introducing these rules has been important in fostering an enabling environment in which institutional investors—as major shareholders—can raise concerns about sustainability and climate risks and issues. Through introducing supporting rules, the United States is now seen as a leader in shareholder activism, particularly with regard to the sustainability agenda. By way of illustration, during this year’s shareholder proxy season, a near-record 110 shareholder resolutions were filed with 94 U.S. companies on corporate sustainability challenges such as climate change, supply chain issues and water-related risks. Outcomes included (Ceres, 2013):

- Dunkin Brands, Kroger and Starbucks agreed to source 100 per cent certified sustainable palm oil to reduce GHG emissions and protect workers, rainforests and species.
- Bed Bath & Beyond, Best Buy, EMC, Gap, Kohls, Nike, Texas Instruments, Target and Xerox agreed to encourage or require sustainability reporting by their suppliers.
- Coach Inc, Ralph Lauren, Starwood Hotels and Resorts, and nine other companies agreed to issue comprehensive sustainability reports.
- Stryker, a large medical equipment manufacturer, agreed to set GHG reduction goals.

Shareholder activism remains in its infancy in Asia and across Asian investors. However, this is likely to change as transparency improves and global influences come into play.

Carbon Disclosure

Investors, as shareholders, can use information and data that encourage the companies they invest in to account for and be more transparent over environmental risks, exposures and performance.

For example, in the U.K., companies listed on the London Stock Exchange are now required to publish their GHG emissions in corporate earnings reports. Affecting almost 2,000 businesses, companies must publish annual GHG emissions, measured in tonnes of carbon dioxide equivalent. By 2015, it will apply to all 24,000 large corporations based in the U.K.

BOX 5. THE CARBON DISCLOSURE PROJECT

Voluntary and non-regulatory-based initiatives are increasingly playing a role in environmental risk disclosure. For example, the Carbon Disclosure Project (CDP)—an international, not-for-profit organization that provides a global system for companies to measure, disclose, manage and share certain environmental information—has over 720 institutional investor signatories with a combined US\$87 trillion in assets. The program provides these investors with corporate information on environmental risk, the intention of which is to increase transparency around climate-related investment risk and commercial opportunities.

Today, more than 3,000 organizations in about 60 countries measure and disclose their GHG emissions, water management efforts and climate change strategies.

There is still much to be discussed and implemented on disclosure to encourage the investment industry to make more sustainability-aligned investment decisions, and there are also a number of challenges to overcome.

- The **issue of materiality** remains unclear, including what comprises material risks, what comparative information is needed to understand materiality across asset classes and what level of granularity is sufficient?
- Reporting on allocation to and performance of long-term investments is important, but in order to be effective, this needs to be completed against **standardized methods and categorizations**.
- Striking a balance between transparency and the **need for confidentiality and protection** of proprietary information is important.
- There are also challenges related to the metrics needed for disclosure and the consistency in these **metrics and data**.

In certain countries, regulators are looking at whether the investment industry should fully disclose the carbon and natural-resource pricing in their asset valuation so that it is consistent with the principles of material-risk reporting. The purpose of such a regulation would be to inform beneficiaries about how capital is being deployed but cannot be done until carbon and natural resources are accurately priced within the current market framework.

3.1.4 Pricing Sustainability Risks Accurately

Undertaking sustainability risk assessments across asset classes and portfolios is increasingly important. For example, in relation to climate risk, when investors undertake assessments of climate risk, the result is changes to investment strategies. In the recent Global Investor Survey on Climate Change (Global Investor Coalition on Climate Change, 2013), 25 per cent of the asset owner respondents stated that they had made changes based on their assessment of climate risk (56 per cent of asset owners stated that a climate risk assessment is conducted and 45 per cent of those investors made changes based on the assessment). Forty per cent of asset managers had made changes based on their assessments. However, despite these numbers, there is still a high level of scepticism and low level of understanding within the industry itself. Put simply, many investment professionals do not believe that there is a financial impact on the performance of their portfolios.

Even when they do, these professionals lack the knowledge and tools on how to identify, quantify and measure sustainability risks on an ongoing basis. To date, most environmental costs have yet to be internalized within asset values. However, as Litterman (2011, p. 8) argues, “when risks are not priced appropriately, investment behaviour creates the potential for catastrophic—and unnecessary—future loss of society’s well-being.”

The result has been that many investors continue to invest in companies and sectors that will be significantly affected by a range of different scenarios, many of which are highly likely to occur in the context of sustainability and climate change. For example, these scenarios may include:

- The creation of markets that aim to correctly price externalities into the economic model (e.g., emissions, water usage).
- Regulatory requirements for the significant improvement of health, safety and labour practices, particularly in developing countries.

Concern about “stranded assets”² is gathering momentum and the longer the investment industry remains dogmatically sceptical to this, the greater the potential loss of portfolio value. Focusing on carbon alone, carbon exposure within portfolios could be huge.

For example, analysis of an emerging markets portfolio benchmarked against the S&P/IFCI LargeMidCap Index has shown varying carbon exposure at the company level. At US\$108 per tonne of carbon dioxide equivalent by 2030, carbon costs could equate to more than 100 per cent of earnings before interest, taxes, depreciation and amortization for 16 firms from emerging markets (Tonello, 2013).

From the policy and regulatory perspective, the immediate starting point is creating a price for carbon, and then ensuring that this price is strong enough to provide an accurate signal to investors by establishing a carbon floor price. Where a carbon price does not exist or is weak, investors are encouraged to focus on short-term financial rewards with little or no regard to the environmental externalities being created. Furthermore, the greater the uncertainty on price, the higher the cost of capital and the more likely investors are to delay in directing private capital towards sustainable investment opportunities.

From the investor perspective, understanding exposure to GHG emissions is becoming increasingly important. In a recent survey by the Global Investor Coalition on Climate Change (2013), few respondents indicated that they are conducting assessments of emissions exposure (26 per cent of asset owners, 30 per cent of asset managers); however, qualitative responses indicated higher levels of informal activity. The key challenges faced by investors in understanding their emissions-intensive investment exposure include patchy carbon pricing signals and inadequate company disclosures.

3.2 Policy Focus: To address imbalances and disincentives within the investment industry itself that create barriers to sustainable and green investment

Policies, regulations and requirements that specifically build capacity and target the internal workings of the financial institution and behaviour of the investment professional are also required. This includes policies on key issues such as remuneration and incentive structures, the concept of stewardship for the investor and the nature of corporate reporting.

3.2.1 Remuneration in the Investment Industry

One of the most profound impacts of the global financial crisis has been the focus of debate, particularly in the United States, Europe and Australia, on remuneration and incentive structures within the financial industry, and how existing structures have fostered an endemic short-termism, embedded within practices, cultures and expectations of the industry.

² A stranded asset has lower market value than that recorded on the balance sheet because it has become obsolete in advance of complete depreciation.

There are two issues with regard to remuneration:

1. Greater transparency in executive pay is needed, whereby investors have been lobbying for the right to have both transparency in and input to the remuneration of the executives of the companies in which they invest.
2. Incentive structures and remuneration packages are needed within the investment industry itself, particularly within the asset management sector, which provide advisory services to the asset owners.

The former issue is an important element in facilitating the investment industry to make more informed decisions. In fact, in Switzerland, concern for such transparency is so high that 68 per cent of Swiss voters accepted a groundbreaking proposal that would require shareholders to approve the pay of executives and board members of public companies. These types of events establish a new expectation for executive pay and transparency.

However, the latter issue is the main concern of this paper. At the micro-level, remuneration and incentive structures are the key drivers of investors' time horizons (Zadek, 2013) and one of the most direct mechanisms of changing investor behaviour.

Policy-makers face significant challenges in that these asset management firms continue to remunerate their investment managers on the expectation of profits being made in the current year, a trend that is being encouraged as asset management firms compete with investment banks to retain talent. This is compounded by the common practice of applying specific benchmarks (the application of performance measurement techniques) to the performance of individuals and teams, the majority of which are based on short-term investment performance, thereby undermining any consideration of long-term real return objectives (Dijkstra, 2012).

BOX 6. U.K. POLICY ON REMUNERATION IN THE INVESTMENT INDUSTRY

The U.K. has been discussing reform to remuneration structures since the publication of Lord Myner's Review in 2001 and provides an interesting case study in which to explore the issue in more detail. Most recently, the *Kay Review of UK Equity Markets and Long-Term Decision-Making*, published in 2012 by the Department for Business, Innovation and Skill, is one of the most comprehensive reviews to consider how current remuneration structures promulgate short-term approaches to investment decision making. The review concluded that short-termism is indeed a problem in U.K. equity markets, largely due to the decline of trust and the misalignment of incentives throughout the equity investment chain.

While the Kay Review (House of Commons - Business, Innovation and Skills Committee, 2012, p. 80) had the broader objective of making recommendations on how to improve corporate responsibility in the U.K., it specifically recommended that:

Asset management firms should ... structure managers' remuneration so as to align the interests of asset managers with the interests and timescales of their clients. Pay should therefore not be related to short-term performance of the investment fund or asset management firm. Rather a long-term performance incentive should be provided in the form of an interest in the fund (either directly or via the firm) to be held at least until the manager is no longer responsible for that fund.

This recommendation has gained some momentum, with the House of Commons' Business, Innovation and Skills Committee (comprising Members of Parliament) recently arguing that a "regulatory stick" is required to implement the changes recommended in the review. The committee made specific arguments on the issue of fund manager incentives, calling for fund manager performance to be reviewed over longer time horizons than the typical quarterly cycle. However, a policy response is yet to be defined and the debate continues to be contentious (House of Commons - Business, Innovation and Skills Committee, 2013).

While there is wide recognition of the problem, limited progress has been made to implement policies that have a significant and notable impact on incentivizing investment managers to make long-term decisions. It remains to be seen to what extent recommendations such as those contained in the *Kay Review* will change investor behaviour. In the United States, the Dodd-Frank Financial Reform Law has also sought to address executive compensation issues, particularly around disclosure, but specific regulations from the SEC are still needed before any evaluation can be made.

Finally, discussions on remuneration packages for asset managers cannot occur in a vacuum. Any change in policy must also be consistent with the interests of the clients of asset management firms, the asset owners themselves. As Clark (2012, p. 2) points out, specifically in response to the *Kay Review*, asset owners also bear some responsibility for short-termism and limited attention has been given to this. He argues that the “application of an expanded conception of fiduciary duty to investment managers will have little impact if asset owners are not active and effective clients of the global financial services industry.”

3.2.2 Removal of Quarterly Reporting Requirements

Reporting on short-term earnings has increasingly defined the way in which corporations have managed their businesses and subsequently determined the agenda for interaction with shareholders. This behaviour, whereby short-term underperformance is penalized and long-term value creation is ignored, has been promulgated by the investment industry’s myopic focus on the financial performance of a stock on a quarter-to-quarter basis. It is increasingly argued (Aspen Institute, 2007; Generation Investment Management, 2012) that productive engagement between corporations and their shareholders must be supported by the removal of quarterly reporting and enhanced annual reporting.

While considerable debate is still being held on the need for and potential removal of quarterly reporting, the issue is attracting the attention of policy-makers in certain countries.

BOX 7. THE EUROPEAN COMMISSION ABOLISHES QUARTERLY FINANCIAL REPORTS

In 2011 the European Commission introduced a directive to abolish quarterly financial reports on the basis that the value of such reports is questionable when set against administrative costs. In June 2013 the European Parliament, in support of the directive, voted through a series of changes to the EU’s accounting framework, which included abolishing quarterly reporting by 2015.

While the primary driver behind the change in regulation is to improve comparability of information and reduce costs, policy implications will extend to the investment industry and its ability to understand the sustainability objectives and performance of the companies it invests in.

Support from within industry is also increasing. For example, written evidence submitted during the U.K.’s *Kay Review* by Aviva plc (Aviva, 2011, p. 7)—the U.K.’s largest insurer and owner of a global asset management business with assets under management in excess of £370 billion—welcomed the proposal to abolish interim management statements and quarterly reports. It argued:

Such short-term reporting cycles contribute to short-term thinking and can discourage investment for the long-term, given the impact that could have on short-term performance. It is also important to recognise the effects of peer pressure and competition between companies in this context.

Initiatives such as the International <IR> Framework, driven by the International Integrated Reporting Council (IIRC)—a global coalition of regulators, investors, companies, standard setters, the accounting profession and non-governmental organizations—provide regulators with an opportunity to mandate certain reporting requirements. Over the last decade, countries such as China have begun to focus on improving disclosure and reporting. While these developments are positive, the challenges faced are broad, ranging from varying reporting quality, which makes comparison for investors even more difficult, to a lack of common language and metrics. In some cases, the challenges can be compounded by “selective” reporting, whereby reporting certain successful projects serves to encourage investors to have major questions about the quality of disclosure.

BOX 8. SOUTH AFRICA'S KING REPORT ON CORPORATE GOVERNANCE

In South Africa, the Johannesburg Stock Exchange introduced the *King Report on Corporate Governance* in 2011. Compliance with the findings of the report means that all listed companies are required to produce an integrated report or explain why they are not doing so.

The code is non-legislative (rather it is based on principles and practice) and its scope runs well beyond integrated reporting. Its philosophy consists of the three key elements of sustainability, good corporate citizenship and leadership, the latter of which specifically refers to directing the company to achieve sustainable economic, social and environmental performance.

The code views sustainability as the primary moral and economic imperative of the 21st century. It views corporate citizenship as flowing from a company's standing as a juristic person under the South African constitution and stipulates that it should operate in a sustainable manner. The code is widely considered to be the most effective summary of corporate governance leading practices.

BOX 9. THE U.K. STEWARDSHIP CODE

The *Kay Review* recommended that a Stewardship Code be developed, focusing on strategic issues as well as questions of corporate governance. The resultant U.K. Stewardship Code released by the Financial Reporting Council in 2010 contains a set of principles and guidelines that are followed on a "comply or explain" basis. While investors are not obligated to follow the code, they have to report on whether or not they follow it.

The code (Financial Reporting Council, 2012) states that, so as to protect and enhance the value that accrues to the ultimate beneficiary, investors should:

1. Publicly disclose their policy on how they will discharge their stewardship, responsibilities
2. Have a robust policy on managing conflicts of interest in relation to stewardship which should be publicly disclosed
3. Monitor their investee companies
4. Establish clear guidelines on when and how they will escalate their stewardship activities
5. Be willing to act collectively with other investors where appropriate
6. Have a clear policy on voting and disclosure of voting activity
7. Report periodically on their stewardship and voting activities

Given the nature of the code, it has been emphasized that institutional investors should carefully consider the explanations given for departure from the code and make reasoned judgements in each case. It is too early to make a detailed assessment of the impact of the code, particularly with regards to changing investor behaviour. However, the regulatory objective is that it should encourage more active engagement and transparency between asset owners and their investment managers.

3.2.3 The Concept of Stewardship

The concept of stewardship is based on the principle that investors, as managers of other people's capital, should be actively engaged in corporate governance activities in the interest of their shareholders and beneficiaries.

From the policy perspective, the concept of stewardship is important in that it aims to enhance the quality of engagement between asset managers and companies to help improve long-term risk-adjusted returns to shareholders. Given the urgent need to take action on sustainability and climate change, the associated risks to investment portfolios are significant.

Through stewardship codes such as that established in the U.K., there is an implicit responsibility on the asset manager to begin identifying and managing sustainability risks on the basis that not doing so will potentially reduce or destroy any value accrued. The emphasis on transparency also provides the asset owners and ultimate beneficiaries of the investments with the information required to ensure that the asset managers act in their best interest.

3.3 Policy Focus: To provide transitional support for the investment industry and ensure a financial regulatory framework that is conducive for sustainable and green investment

Transitioning the investment industry towards sustainable investment practices requires innovative financial mechanisms that reduce risk and/or increase market liquidity, providing guarantees or a de-risking mechanism, particularly to support large-scale infrastructure projects that require high upfront costs. The alignment of the pension industry is clearly important given the size of assets, but also the long-term liabilities many face. Finally, working with other actors in the financial ecosystem, such as rating agencies and stock exchanges play a key role in transitioning the investment industry.

3.3.1 The Role of Government in Accelerating Private Capital Deployment

The types of projects and investment opportunities that will support sustainable growth, particularly in terms of building a green economy (e.g., large-scale infrastructure projects, renewable energy installations, energy-efficiency programs) often do not appear attractive to investors on the basis of their risk profiles, upfront costs, and political and regulatory uncertainty. Furthermore, while risks can sometimes be identified, often the transferral and mitigation of these risks can be poor.

By way of illustration, a recent survey of discount rates for low-carbon investments in the U.K. suggested that the discount rate for many low-carbon technologies was around 3–4 per cent higher than for a conventional power generation plant (Sullivan, 2011). The risk premium can be substantial where technological risk perceptions are high, as is often the case with many newer low-carbon technologies. This is particularly noticeable in the financing of renewable energy where return requirements can be high, depending on the asset class.

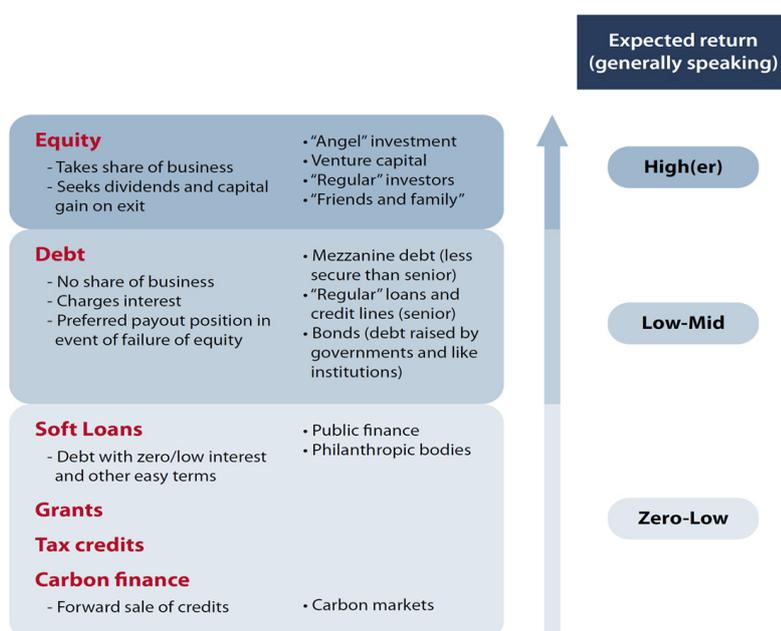


FIGURE 2: COMPONENTS OF LOW-CARBON INVESTMENTS

Source: Australian Securities Exchange, 2013

Governments are playing a role in developing new risk-sharing models and removing barriers to long-term investment (Institutional Investors Group on Climate Change, 2013). For example, as far back as 2003, the Thai government launched the Energy Efficiency Revolving Fund to overcome barriers within the financial sector to stimulate adequate financing for energy efficiency. Boxes 10 and 11 outline examples of different government vehicles aimed at de-risking green investments in order to accelerate private capital deployment.

BOX 10. U.K.'S GREEN INVESTMENT BANK

The Green Investment Bank (GIB), created in 2012 by the U.K. government, is the first bank of its kind. Its primary purpose is to boost private investment into the green economy. The remit of the GIB is not to provide grants or zero-interest loans, but to provide support through capital structure and debt along with other banks, equity and guarantees.

Having received £3 billion in funding from the U.K. government, the GIB is required to support domestic investment projects with a focus on the following priority sectors:

- Offshore wind
- Energy efficiency
- Waste to energy
- Waste recycling

The GIB faces a number of challenges, not least that it must attract private sector investment in a difficult climate, both politically and economically. The bank is also currently unable to borrow against its assets, restricting its investment capacity. In terms of sourcing investment opportunities, while the bank has invested an impressive £635 million in the last six months (Agbonlaher, 2013), building a solid pipeline of suitable deals can be challenging and is dependent on other factors such as government policy in certain sectors. Policy uncertainty continues to haunt the GIB, with potential changes to government policies on both sustainability and energy having negative impacts on investor confidence. Given its funding and the political nature of its establishment, the GIB is also subject to a high level of public scrutiny. As a consequence, it is required to have robust policies in place to ensure that projects are “green enough,” particularly in terms of supply chains and the carbon cycle.

The GIB also has some way to go on creating the right type of culture to both incentivize and work with the investment industry. “We need a collaborative culture,” Shaun Kingsbury, CEO of the GIB, recently stated, “because our job is to partner with people to catalyse other private sector investment. We need to develop a culture of working together with the industry; so while we are very focused on making money as well as making our green bottom line, we have to do that with a style that makes us a good partner for everybody” (Agbonlaher, 2013).

BOX 11. CONNECTICUT'S CLEAN ENERGY FINANCE AND INVESTMENT AUTHORITY

A similar model to the U.K.'s GIB is being pursued at a state level in the United States. Connecticut's Clean Energy Finance and Investment Authority is the first green bank of its kind in the United States. The purpose of the agency is to leverage private capital and develop innovative financing tools to promote the deployment of renewable energy projects.

Since it was established in 2000, the Clean Energy Finance and Investment Authority has provided more than US\$105 million in funding towards renewable energy development. In addition to private capital, funding also comes from surcharges on residential and commercial energy bills, Regional Greenhouse Gas Initiative allowances and federal funds and grants.

Government intervention is particularly urgent given that recent balance sheet de-risking has resulted in banks being much more constrained in terms of providing project finance. Policy-makers can provide risk mitigation to those long-term investment opportunities that support sustainability goals and are critical to addressing the challenges of climate change. The OECD (2013) identifies these risk mitigation mechanisms as including credit and revenue guarantees, first-loss provisions, public subsidies and provision of bridge financing via direct loans.

3.3.2 Other Investment Instruments

A number of institutional investors, notably pension funds and insurance companies, have an increasing appetite for direct investment and lower-gear, longer-dated structures—as opposed to the traditional infrastructure fund model, which has limited life and uses leveraged structures that are often not fully understood by investors (Institutional Investors Group on Climate Change, 2013). Governments can help the private sector develop a wider range of investment structures, particularly in order to attract different types of investors.

In order to be effective, these must be supported by both suitable and predictable supervisory frameworks, both within and across jurisdictions. For example, the issue of tax neutrality, with regards to different types and structures of financing vehicles, should be assessed and promoted (OECD, 2013). Such structures also need to be aligned with broader capital market development objectives, in addition to debt management targets at a national level.

Pooled Vehicles

Pooling of assets, such as in pension funds, presents an opportunity across different asset classes and products to diversify investment risks and develop insurance products. Asset pooling across pension funds offers a new model that has the potential to provide suitable vehicles for long-term sustainable investment by asset owners.

BOX 12. THE U.K.'S PENSION INFRASTRUCTURE PLATFORM

Recently, the U.K. government, along with the National Association of Pension Funds and the Pension Protection Fund, created the Pension Infrastructure Platform, under which the “Founding Investors” (a number of U.K. pension funds) will provide around half of the target £2 billion of investment capital. The purpose of the capital will be to invest in “core” operating infrastructure assets, based on long-term inflation-linked returns (Mann, 2013).

Public-Private Partnerships and Project Bonds

Public-private partnerships (PPPs) are structured to leverage private capital funding to enable public investment in infrastructure projects, particularly those that enhance environmental sustainability and/or deal with climate change mitigation and adaptation. The Asian Development Bank (2008, p. 1) argues that PPPs “present a framework that—while engaging the private sector—acknowledge and structure the role for government in ensuring that social obligations are met and successful sector reforms and public investments achieved.”

PPPs could play a critical role in meeting Asia’s US\$8 trillion infrastructure investment need. Putting this in context, from 1990 to 2011, total PPP investment in the region had been around US\$823 billion. Looking forward, nearly 70 per cent of the estimated infrastructure investment until 2020 is for new capacity. However, while Asia has the benefit of learning from a generation of PPP successes and failures, the policies and legal frameworks to support and leverage PPPs remain limited. There is widespread agreement in the region on the potential for PPPs to be the “enablers” of sustainable growth.

However, action appears to be restricted by lack of transparency and accountability in PPP projects, as well as difficulties in defining alternative measures of costs and returns and understanding shareholder value.

Project bonds, specifically for infrastructure projects, offer an opportunity for institutional investors to participate in green investment opportunities through listed, tradable securities that can offer superior risk-adjusted returns if structured appropriately. However, many institutional bond investors, while happy to take on performance risks,

may not be willing to take on any form of construction risk. Governments can play a role in reducing or removing construction risk and providing credit enhancement. If project bonds can be structured to offer a strong credit rating, “green” project bonds can provide an attractive instrument (Institutional Investors Group on Climate Change, 2013).

BOX 13. THE EUROPEAN INVESTMENT BANK’S 2020 PROJECT BOND INITIATIVE

The European Investment Bank—through its 2020 Project Bond Initiative—is pursuing a similar model, whereby the EIB will provide credit enhancement in the form of a subordinated instrument (either a loan or contingent facility) to support the senior debt issued by the project company. In effect, the project company will operate as a public private partnership (PPP) established to build, finance and operate an infrastructure project.

3.3.3 The Role of Public Pension Funds

With pension funds representing the largest category of any institutional investor, the investment strategies of public pension funds are critical in achieving sustainability goals and developing the green economy. There is a positive trend of pension funds, mostly in developed markets, increasingly integrating sustainability criteria into their investment strategy and underlying investment processes. Europe has seen a notable uptake, with investment volumes more than doubling over the past five years and with a volume of €6.7 trillion (£5.8 trillion), close to 50 per cent of all professionally managed assets in Europe.

This trend is being pushed by the strategies and actions of public pension funds, with an increasing number of government-sponsored pension funds explicitly committing to an investment approach that incorporates sustainability considerations. This is taking different forms—for example, application of “best-in-class” and/or exclusion investment approaches, specific integration of ESG criteria into portfolio construction, or adopting active shareholder policies for key investments.

Some countries were early movers in terms of regulatory changes. For example, in July 2000, an amendment to the U.K. Pension Act required all U.K. occupational pension funds to disclose which (and to what extent) ethical, social and environmental issues affect their investment decisions. This disclosure is included in their Statement of Investment Principles.

BOX 14. THE NORWEGIAN GOVERNMENT PENSION FUND

By way of illustration, the Norwegian Government Pension Fund represents one of the largest and most established pension funds with a clear sustainability-aligned investment strategy. Established in 1990 by the Norwegian Parliament as the Government Petroleum Fund, its purpose is to support the country’s public pension system through the management of net proceeds from Norwegian oil and gas production.

Its stated strategy is to apply certain investment approaches, including application of ethical and environmental criteria, and use international norms including OECD guidelines and the United Nations Global Compact to guide its investment strategy. In addition, the Norwegian Government Pension Fund follows an active shareholder policy, with close involvement with portfolio companies on governance-related issues.

With regard to environment-related investments, limits within the investment management mandate are defined by the Ministry of Finance, with an overall target in the range of NOK20 billion–NOK30 billion. Internal guidelines give priority to investments in energy efficiency, water consumption and waste management in the real estate portfolio.

The Norwegian pension fund industry has made some bold moves in making disinvestments out of certain companies and industries in recent years. Divestment, particularly in relation to climate concerns, is a growing trend—for example, in the *Global Investor Survey on Climate Change*, it was found that asset owners reporting that climate concerns had led to an investment being avoided or a divestment being made increased to 23 per cent in 2012, from 9 per cent in 2011. The practice of divestment, particularly by pension funds, can send a powerful signal to the market (Global Investor Coalition On Climate Change, 2013).

BOX 15. PENSION FUND FOR BANCO DO BRASIL EMPLOYEES (PREVI)

The largest pension fund in Latin America, PREVI, was created in 1904, prior to Brazil's Official Social Security system. PREVI is a closed investment entity that comprises members of Banco do Brasil and PREVI employees. The commitment to social and environmental responsibility is clearly stated in the fund's vision.

Through its investment philosophy, sustainability issues are viewed as important determinants of a fund's capability to generate and preserve value over the long term. Likewise, its investment strategy is driven by the belief that companies that do not properly manage social and environmental issues are more exposed to risk and likely to promulgate value-destruction activities and impacts. In order to achieve this, PREVI applies exclusion criteria (including the tobacco and weapons industries) and integrates sustainability and ESG criteria in investments across all asset classes.

Challenges and Opportunities Facing Public Pension Funds

While pension funds are sometimes faced with restrictive liquidity requirements, the fiduciary duty of pension fund trustees is to maximize returns for the beneficiaries of the fund. At times, this has been incorrectly interpreted as the need to focus on short-term financial returns (share prices and dividends) as opposed to long-term sustainable returns.

Governments can play a defining role in ensuring that pension fund trustees and their investment boards correct this interpretation, with the overall objective of defining investment strategies that benefit not only their beneficiaries but the society and environment in which those beneficiaries play a role. However, problems can also arise when there is too much government control, where directing investment does not necessarily result in long-term alignment with sustainability priorities. This may be because government direction is favouring shorter-term politically driven objectives such as job creation or national infrastructure developments. There needs to be a balance between social needs, sustainability goals and returns to beneficiaries. Achieving this balance is the primary role of the pension fund and its trustees.

In Asia specifically, particularly in China and Thailand, aging populations pose another significant challenge to the region's policy-makers, who are now looking beyond national pension schemes. While still in their infancy in Asia, the region is seeing accelerated growth in private pension funds and policy frameworks are needed to support and sustain this sector. These funds already represent a major source of potential finance for sustainability, with the added benefit of addressing one of the major social and economic sustainability concerns of the region. However, such private pension funds, and the larger asset owner community in general, tend to lag behind the West in terms of understanding sustainability issues. Supportive policies are required to foster the development of a more sophisticated understanding of sustainability risks in addition to supporting the long-term return objectives that pension funds must achieve.

3.3.4 Application of Sustainability Indices

The development of sustainability indices can play a role in providing investors with tools and mechanisms for sustainability-aligned investment strategies. Such indices allow investors to increase their exposure to those companies at the forefront of the sustainability agenda that are focused on industries related to sustainability and climate mitigation and/adaption. These companies include renewable energy, energy efficiency, and/or companies that have addressed their most material environmental issues and therefore pose a lower investment risk in comparison with their peers who have left these issues unabated.

How policy-makers and regulators can use sustainability indices remains to be explored. However, certain innovative policies have been created on their backs.

BOX 16. BRAZIL'S STOCK EXCHANGE – SUSTAINABILITY INDEX

BOVESPA, the Brazilian stock exchange located in Sao Paulo, established a sustainability index aimed at providing a benchmark for socially responsible investments (the Corporate Sustainability Index, ISE). In addition to promoting good practices in the Brazilian corporate environment, the ISE is designed to measure the return on a portfolio composed of shares of companies highly committed to social responsibility and corporate sustainability.

The Ministry for the Environment has launched a program that provides a line of credit from the world's largest development bank, Brazil's BNDES. The new line is aimed at encouraging private investment alongside municipal and state investment into projects that assist the country in achieving its public policy goals on climate change. In many large-scale projects, BNDES only finances companies that comply with environmental legislation and are present in the ISE index (Deloitte, 2012c).

In theory, sustainability indices play a role in improving corporate performance through increasing demand in the stocks of sustainability leaders. Increasing the entry criteria for sustainability indices over time, in conjunction with publishing leadership tables, has resulted in companies improving their management practices for the sake of remaining in the index. These types of indices are also vital for investors that have to follow passive strategies. However, sustainability indices remain marginal to other types of indices, and research on the potential link between sustainability indices and corporate performance is lacking, in part because of their short history.

There is also a gap between what companies may be doing and what they are publicly sharing. For example, as part of the 2012 review of the Johannesburg Stock Exchange's Socially Responsible Investment Index, Ethical Investment Research Service (EIRIS) conducted a parallel study for the Johannesburg Stock Exchange that assessed standards of public disclosure of ESG issues among South African companies. It found that 20 of the companies that qualified for the 2012 SRI index would not have been included in that index if review of company performance had been based purely on publicly disclosed ESG information (Forum for Sustainable and Responsible Investment in the U.S., 2013).

3.3.5 The Role of Credit Rating Agencies

Rating agencies such as Moody's, S&P and Fitch Ratings are key actors in the financial ecosystem and have an important role in facilitating sustainability-aligned investment strategies, both on equity and fixed-income. However, methodologies used by rating agencies primarily focus on those risks that are quantifiable, usually the nearer-term risks. The rating agencies rarely consider long-term systemic risks, particularly those associated with risks to longer-term viability or resilience to broader trends, scenarios or outcomes, such as the impact of climate change.

Policy-makers are recognizing that rating agency decisions have potentially systemic consequences and affect public finances. They continue to debate their role, function and influence on governments, companies and markets (McAdam, 2012). However, the regulatory reform agenda for credit-rating agencies remains limited and actions that require rating agencies to include sustainability criteria in their methodologies are unlikely to be taken soon.

One of the challenges faced by rating agencies is that certain data is not readily available—for example, most companies still do not measure emissions. Through mandating measurement and disclosure of such data points, rating agencies can include this within their methodologies. The next step for regulators could be to require rating agencies to integrate carbon and natural-resource intensity (emissions per unit of output) into corporate and sovereign credit ratings.

4.0 Conclusions

4.1 Understanding the Challenge

There is much to be done and limited time in which to do it. Both the need and the opportunities for policy-makers and regulators to change the rules of the game for the investment industry are clearly apparent. The momentum for change is gathering pace as pressure increases from many directions, including from within the industry itself.

Ultimately, certain questions must be addressed:

- What are the risks to the investment industry of not acting to align their investment strategies to sustainability goals?
- What are the risks of a wider failure to address sustainability and climate change that threaten the interests of the investment industry?
- What action can be taken by policy-makers and regulators to prevent these risks from manifesting?

While the investment industry is becoming increasingly aware of sustainability as an issue of relevance, the majority of mainstream investors do not perceive sustainability risks as having a material impact on portfolio value. Furthermore, the potential gains from realizing sustainability-related value are not understood and remain unexplored (Zadek, 2013).

In the context of addressing the challenges of sustainability, the capital markets and the financial ecosystem are vital to ensuring both the efficient use and management of private capital. Given the levels of capital investment required, private capital is critical and the majority will come from asset owners—including pension funds, insurance funds and sovereign wealth funds—and subsequently be directed by their investment advisors and asset managers.

The existing frameworks that govern these markets and the investment industry itself are currently ineffective, as sustainability considerations continue to not be factored into mainstream investment decisions and resultant capital flows. Policy and regulation are the key determinants of whether and under what conditions investors will deploy capital and therefore represent the first pillar of transformational change of the financial ecosystem.

4.2 Taking the Next Step

The purpose of this paper is to identify and better understand the types of policy and regulatory approaches that are being developed, used or proposed, to create the right incentives for the investment industry to better align their investment strategies. The value of this analysis is to consider the different policy implications for advancing sustainable and green investment, particularly with regard to financial market reform. In terms of taking the next step, the following conclusions can be drawn:

1. **There are innovative policy and regulatory approaches that can be introduced to transform the environment in which the investment industry operates.**

While introducing direct incentives that specifically target the behaviour of the investment professional, direct incentives are only part of the solution. There are many innovative policy and regulatory approaches that can be used to facilitate investor alignment with sustainability goals and considerations. Policy-makers and regulators are responsible for creating an enabling environment and open market in which the investment industry is encouraged to operate in accordance with these objectives, and for creating sufficient barriers and disincentives to penalize behaviour when not.

Financial incentives that shift the risk-reward balance in favour of low-carbon, sustainable and green growth must be in place. This includes strong and sustained price signals on carbon, supported by well-designed carbon markets (Sullivan, 2011). Governments are also playing a critical role in providing guarantees and de-risking vehicles to mobilize private capital, and they should continue to focus on the development of these, particularly with an emphasis on financial innovation.

These changes can only be done in alignment with stable macroeconomic conditions that encourage long-term investment achieved through “maintaining credible monetary policy frameworks, responsible fiscal policies and sound financial sector regulatory environments” (OECD, 2013). Policies and regulations can encourage and incentivize long-termism while discouraging short-termism.

2. Changes to remuneration and incentive structures are needed to alter investor behaviour.

Investors form part of a financial ecosystem that explicitly and implicitly encourages a short-term perspective on how value is defined, but also on the risks faced and the appropriate management of these risks. The behaviour of investment professionals is largely defined by the rewards that are linked to the performance of their portfolios—altering this is an obvious step towards addressing the short-term mindset. However, this will require regulatory intervention and the investment industry will likely seek to keep any regulations minimal.

Regulation can require performance-based contracts for fund managers and senior executives, with the requirement that performance should be evaluated over a period of years. Targets could be set against long-term, risk-return criteria and performance rewarded in relation to the level of risk taken over the lifetime of an investment.

Policy-makers and regulators can also play a role in raising awareness and understanding about the benefits of long-term sustainable investing across the investment industry. In part, this can be included in the financial education programs of regulators and mandated through professional training requirements.

3. Financial markets need to identify and price sustainability and climate risks so that investors can effectively quantify, measure and manage these risks.

Ultimately, policy-makers and regulators must progress in creating and developing markets, practices and norms that incorporate long-term sustainability considerations as a matter of course. These markets do not currently exist to the extent that the investment industry needs them in order to quantify, measure and manage the investment risks associated with sustainability.

The majority of investors are still not pricing the risks, costs, returns and values associated with sustainability and green growth; policy-makers and regulators have the opportunity to support the development of these markets in addition to ensuring that the correct governance of these markets is in place. As detailed above, the investment industry requires the tools and mechanisms to support transformational change of the financial ecosystem.

It is also important that the skills and knowledge gap that many investment professionals have in relation to understanding sustainability risks is addressed. In many instances, they lack the ability to identify, assess and adequately monitor sustainability risks within an investment strategy, particularly regarding the allocation of capital towards “sustainability”-focused assets.

4. Barriers to investment created by policy risk and uncertainty must be removed.

Finally, one of the major challenges faced is that government-induced policy risk and uncertainty is ultimately holding back investment in sustainable and green investment opportunities. This needs to be addressed as a priority. Investors require stable, consistent and long-term policy frameworks, with consistency in approaches across different policies and jurisdictions. Long-term investment decisions cannot be made in a policy environment that is subject to political targets and revisions or retroactive changes, particularly in climate policy around which high levels of uncertainty exist. A recent survey by Mercer Consulting (2011) found that climate policy uncertainty is a notable source of risk for investors over the coming 20 years, contributing as much as 10 per cent of the risk for a representative portfolio. The report argued:

Make policies clear, credible and coordinated. Policy design needs to be clear, credible and well-coordinated internationally to attract institutional assets and to help reduce risk premiums assigned to riskier investments.

A high level of policy uncertainty will increase volatility and lead investors to demand a higher risk premium on their investments than would otherwise be the case.

Policies should be designed that are consistent with the best interests of all stakeholders—investors, beneficiaries, policy-holders and society as a whole—ensured. Furthermore, policies should be consistent with “financial regulation objectives, ensuring the security, quality, liquidity, profitability and appropriate diversification of the portfolio as a whole” (OECD, 2013).

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