2014 Asia Sustainable Investment Review

Association for Sustainable & Responsible Investment in Asia

ASrIA

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CREDITS & ACKNOWLEDGEMENTS

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We would like to thank all individuals and organizations that took the time to respond to our survey, including:

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RS Group
Saturna Sdn. Bhd.
Vietnam Holding Limited
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YES Bank

Other survey participants requested to remain anonymous.

About ASrIA

The Association for Sustainable & Responsible Investment in Asia (ASrIA) is the leading organization in Asia dedicated to promoting sustainable finance across the region. ASrIA plays a critical role - as a thought leader, convener and advocate - in facilitating Asia's transformation to a sustainable future and encouraging thoughtful participation by governments, multilateral bodies, corporates, NGOs and financial institutions in addressing the challenges that Asia will face in the years ahead. For over 13 years, ASrIA has provided leadership, helped to build capacity and leveraged expertise to promote the development of sustainable financial markets and systems in Asia. ASrIA encourages financial innovation and disseminates global best practice on resource allocation, environmental protection and climate resilience.

About AIGCC

The Asia Investor Group on Climate Change (AIGCC) is an initiative set up by ASrIA to create awareness among Asia's asset owners and financial institutions about the risks and opportunities associated with climate change and low carbon investing. AIGCC provides capacity for investors to share best practice and to collaborate on investment activity, credit analysis, risk management, engagement and policy. With a strong international profile and significant network, including pension, sovereign wealth funds, insurance companies and fund managers, AIGCC represents the Asian voice in the evolving global discussions on climate change and the transition to a greener economy.

About the sponsors

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Sindicatum Sustainable Resources is a developer, owner and operator of clean energy projects worldwide and a producer of sustainable products from natural resources and waste. Sindicatum is leading the way in the sustainable utilization of the world's natural capital.

Supporting Sponsor

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About the contributing countries

China SIF (China Social Investment Forum) is a non- profit membership association, aiming to provide a platform for investors and other stakeholders to discuss SRI opportunities in China and promote the development of China's SRI market. China SIF invites guest speakers including professionals from SRI organizations, corporate social responsibility experts, and representatives from financial market home and abroad to join online and offline discussions on SRI in China.

Our mission is to support the values of sustainability in the ESG issues, to encourage the culture of long term investment in the financial market, to establish the standards and criteria for SRI in the Korean context, to raise the investors' awareness on the importance of active ownership and promote the exercise of stockholder's rights, and to endeavor the integrity and sustainable development of the society at large through the expansion of SRI practices.

Responsible Investment Research Association (RIRA), is India's Sustainable Investor Forum, a non- profit initiative that serves as a catalyst in knowledge creation and mainstreaming of Environment, Social and Governance (ESG) issues in investment and lending decisions through (a) Initiating and Partnering in cutting edge Extra financials' Research (b) Generating Awareness in Investors & Financial Community (c) Developing thematic focus on Sustainable Infrastructure and Climate Finance. While Bloomberg, IDFC, GIZ, MCX SX and YES Bank are the founders, others such as ICICI Prudential AMC, Penn Schoen Berland and PwC are some of the key members.

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FOREWORD FROM ASrIA

ASrIA is proud to present the *2014 Asia Sustainable Investment Review*. The Review offers unique insights into the strategies of investment decision-makers in the region. Its purpose is to inform readers about how the market has evolved in recent years, identifying emerging trends and themes across Asia to better understand how this evolution may continue. By looking at individual markets, the Review also provides a perspective on local differences and nuances, in addition to highlighting country-level success stories and emerging best practices.

The Review confirms that we are seeing a steady growth in sustainable investment assets across the Asia market. However this figure is small in relative terms: most markets remain in the early stages of development but, where progress is being made, it is clear that a multi-stakeholder approach is being adopted. In order to grow the market, we need the investment community, along with policy-makers, regulators and other stakeholders, to support efforts that allow for market standardization, reduction of transaction costs and the mainstreaming of sustainable investment strategies.

Enabling change in Asia's sustainable investment market also requires more informed investors. It is encouraging that many of the region's bourses have introduced or are introducing more comprehensive requirements for disclosure on sustainability and ESG issues. This is critical for progress in the market. The Review also confirms that investors in Asia are increasingly concerned about climate risk, with climate change considered an issue for both dedicated sustainable investment managers as well as more mainstream asset managers. This is promising and we are hopeful that our initiative, the Asia Investor Group on Climate Change (AIGCC), has played a constructive role in pushing climate change up the investor agenda.

The Review also turns the spotlight on a number of emerging themes that are of increasing relevance to the region's investment industry – these include the need for clean energy investment, the emergence of green bonds, the potential role for impact investing and the opportunities for conservation finance. Excitingly, discussion on these themes demonstrates that the sustainable investment landscape is constantly evolving – and that evolution brings abundant opportunity for progress.

Asia is a region full of contrasts: home to some of the wealthiest individuals, it also shelters some of the poorest nations. Financial markets and their actors are often accused of being part of the problem. And yet there is an opportunity for Asia's financial markets to be part of the solution. In this vein, organizations like ASrIA play an important role in providing a platform for collaboration and information sharing. Through facilitating dialogue between the different actors involved in the capital markets, both private and public, our goal is to proactively promote sustainable growth models for Asia.

Finally, I would like to thank survey participants, sponsors and the ASrIA team, without whom the research and preparation of the *2014 Asia Sustainable Investment Review* would not have been possible. If you would like to provide feedback on the Review or learn more about our activities in the region, please do not hesitate to contact me directly.

Jessica Robinson
Chief Executive Officer
Association for Sustainable & Responsible Investment in Asia
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FOREWORD FROM OUR SPONSORS

Credit Suisse AG is pleased to support the publication of the *2014 Asia Sustainable Investment Review*. Over recent years, the market for sustainable investing in Asia has continued to develop. Investor awareness has been aided by a steady flow of news on a range of developmental challenges affecting communities and the environment across the region, and this awareness has been mirrored by an increase in the number of investible ideas with a positive social or environmental impact. There remains plenty of work to be done across investor education, capacity building within financial institutions, in aligning the common interests of different stakeholders, and in the integration of ESG into financial research and the development of financial products. We are hopeful that this Review will help reinforce the positive trends that are apparent to those active in the sustainable investment market, and will help the nascent sub-sector in Asia take another step towards integration in mainstream investing.

Ben Ridley
Asia Pacific Head, Sustainability Affairs
Credit Suisse AG

As a leading Asian developer and owner of clean energy projects, Sindicatum Sustainable Resources ("Sindicatum") is committed to the sustainable investment market, particularly in Asia where the need to redirect capital towards long-term sustainable solutions is ever-apparent. Channeling private capital to its most productive use with a balanced risk-return profile, while making a positive impact and combating climate change, should be front of mind for every investor. Sindicatum is proud to support the *2014 Asia Sustainable Investment Review* – a unique snapshot of regional market developments. The Review plays a critical role in informing investors and other stakeholders of the positive trends in Asia's sustainable investment markets, while also demonstrating the urgent need for clearly defined and more comprehensive policy and regulatory action.

Assaad Razzouk
Group CEO
Sindicatum Sustainable Resources

EXECUTIVE SUMMARY

ASrIA is proud to present the *2014 Asia Sustainable Investment Review*. The purpose of the Review is to provide the investment industry, both specialist and mainstream, with an overview of the characteristics of the market for sustainable investment in Asia.

Its findings also provide valuable insights to other stakeholders including policy-makers, regulators, NGOs and broader market players. In line with ASrIA's mission, the Review is intended to facilitate a sustainable future for Asia.

Review outline

The Review outlines the current state of the sustainable investment market in Asia. This is followed by an analysis of the sustainable investment practices based on a survey of market participants and insights into current and future industry trends.

In addition, the Review highlights four emerging themes of increasing relevance and importance to the investment industry in Asia:

- Clean energy
- Green bonds
- Conservation finance
- Impact investing

The Review concludes with highlights from in 11 key markets in Asia:

- China
- Hong Kong
- India
- Indonesia
- Malaysia
- Philippines
- Singapore
- South Korea
- Taiwan
- Thailand
- Vietnam

Market highlights

The overall market for sustainable investment in Asia is robust and growing. There are a number of new actors in the market and established investment managers are responding to increased demand by expanding their product ranges.

Sustainable investment assets in Asia (ex-Japan) now stand at US$44.9 billion, representing a year-on-year increase of 22% since 2011.

While this only comprises a small percentage of the funds under management in Asia, it is evident that there has been a positive growth in the sustainable investment industry over recent years.

There are notable differences in individual markets. Using the data collected for this review, the largest markets were found to be (as a percentage of the Asia market):

- Malaysia (34%)
- Hong Kong (25%)
- South Korea (19%)
- Singapore (13%)

The fastest growing markets since 2011 are:

- Indonesia (39% CAGR)
- Singapore (38% CAGR)
- Hong Kong (24% CAGR)

Emerging characteristics of sustainable investment strategies in Asia

The **most commonly adopted sustainable investment strategies in Asia appear to be ESG integration** at US $23.4 billion (52% of sustainable investment assets) and exclusion/negative screening at US$16.6 billion (37% of sustainable investment assets).

Sustainability themed strategies are gaining momentum - the fastest growing segment with 56% growth per year since 2011 - due to the rising importance of ESG issues such as climate change, energy and water security in the region.

Islamic funds in Malaysia and Indonesia are a **major contributor** to net assets that adopt exclusion/negative screening.

The region's major **global financial centers** (Singapore, Hong Kong and Seoul) and Kuala Lumpur where the Malaysian government has been actively supporting development of the Islamic funds market for a number of years – account for the majority of survey respondents and **90% of all reported sustainable investment assets**.

Climate change is an important issue for investors, and targeted investments to tackle environmental challenges are growing in importance. 62% of respondents state that climate risk will be more important in the next two years.

Greater investment attention is also likely to be given to **natural capital risks and valuation**.

2013 was an important year for sustainable investment in the region…

…with significant green financing initiatives introduced by several governments including China and Indonesia; the issuance of Asia's first green bonds from the ADB and KEXIM; and widespread developments on ESG-related disclosure policies.

Investors' growing concerns about sustainability issues, particularly on climate change, and sustainable investment returns are expected to form an important incentive for the development of the sustainable investment market in Asia in the coming two to three years.

ABOUT THE REVIEW

Purpose of review

The purpose of the *2014 Asia Sustainable Investment Review* is to provide the investment industry, both specialist and mainstream, with an overview of the current status and trends of the market for sustainable investment in Asia. Its findings also provide valuable insights to other stakeholders including policy-makers, regulators, NGOs and broader market players. In line with ASrIA's mission, the Review is intended to facilitate dialogue between the different actors involved in the capital markets, both private and public, in order to proactively promote sustainable growth models for Asia.

Sustainable investment defined

Sustainable investment is an approach to investment where environmental, social and governance (ESG) factors, in combination with financial considerations, guide the selection and management of investments.[i] It includes any investment management practice that goes beyond traditional narrow financial analysis to incorporate ESG considerations.

Within this additive layer various practices exist – for example, excluding certain companies or sectors; making adjustments to financial projections; or seeking positive outcomes in addition to financial returns. Many investors will also make simultaneous use of different sustainable investment strategies in their investment management. For example, an investor that excludes certain sectors may also seek positive outcomes in the remaining investible universe.

While differing definitions and categorizations exist as to what sustainable investment entails, those introduced by the Global Sustainable Investment Alliance (GSIA) in the Global Sustainable Investment Review in 2012 have emerged as an industry standard. These are[ii]:

1. Negative/exclusionary screening
2. Positive/best-in-class screening
3. Norms-based screening
4. Integration of ESG factors
5. Sustainability themed investing
6. Impact investing
7. Corporate engagement and shareholder action

The Review uses the GSIA definition of sustainable investment strategies as the basis for its analysis of data and subsequent conclusions.

Research methodology

The data and information presented in the Review are collected from a number of sources including:

- Asset data collated from investment fund data provided by the Bloomberg Professional® service;
- Survey data from an online questionnaire responded to by asset owners and asset managers based in Asia;
- Data and country information from national SIFs in Asia (including China SIF, KoSIF and India SIF);
- Interviews and other input from industry experts, including individual asset manager responses; and
- Additional desk-based research.

All figures are reported at 31 December 2013.

Further detail on the research methodology employed is outlined in Appendix One. This includes classifications used, research limitations and survey coverage.

Review outline

The Review covers the key findings from the research, with a detailed description of the current state of the sustainable investment market in Asia. This is followed by an analysis of sustainable investment practices based on a survey of market participants and insights into current and future trends in the industry.

In addition, the Review highlights four emerging themes of increasing relevance and importance to the investment industry in Asia:

- Clean energy
- Green bonds
- Conservation finance
- Impact investing

The Review concludes with detailed analysis on the recent developments and trends of sustainable investment in 11[iii] key markets:

- China
- Hong Kong
- India
- Indonesia
- Malaysia
- Philippines
- Singapore
- South Korea
- Taiwan
- Thailand
- Vietnam

THE STATE OF SUSTAINABLE INVESTMENT IN ASIA

Asia's sustainable investment market is robust and growing

Since 2011, there has been a steady growth in Asia's sustainable investment industry. According to data collected for this Review, as of the end of 2013, there were US$44.9 billion of assets in Asia (ex-Japan) being managed using one or more sustainable investment strategy.

On aggregate, sustainable investment assets have grown by 22% per annum since 2011.

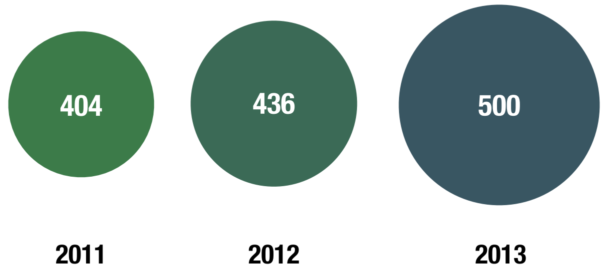
The most common strategies used are:

- ESG integration (US$23.4 billion)
- Negative/exclusionary screening (US$16.6 billion)

The fastest growing strategies since 2011 are:

- Sustainability themed investing (56% CAGR)
- Negative/exclusionary screening (24% CAGR)

Figure 1: Number of sustainable investment funds in Asia



Source: ASrIA, 2014

Sustainable investment funds in Asia - an indicator of development

The growing number of funds available for investors in the region is also an indicator of development of the industry, as growth indicates new product development by asset managers. This has grown by 11% per annum from 2011 to 2013 to reach a total of 500 funds.

The strong growth in terms of fund assets and fund availability illustrates that, despite slower economic growth in the region in recent years, the sustainable investment market in Asia is dynamic.

*The **strong growth** experienced in terms of fund assets and fund availability illustrates that, despite slower economic growth in the region in recent years, **the sustainable investment market in Asia is dynamic**.*

Table 1: Sustainable investment asset growth 2011-13

US$ Millions	2011	2013	CAGR
Integration	$16,535	$23,406	19%
Negative/exclusionary screening	$10,819	$16,552	24%
Sustainability themed investing	$866	$2,095	56%
Positive/best-in-class screening	$1,768	$1,726	-1%
Corporate engagement and shareholder action	nm	$1,158	na
Total	**$29,988**	**$44,937**	**22%**

Source: ASrIA, 2014

Sustainable investment assets in individual markets in Asia - differences across the region

Using the data collected for this Review, aggregate sustainable investment assets by market have been broken down to the country-level. On this basis, the largest markets were found to be (as a percentage of the Asia market):

- Malaysia (34%)
- Hong Kong (25%)
- South Korea (19%)
- Singapore (13%)

The fastest growing markets since 2011 are:

- Indonesia (39% CAGR)
- Singapore (38% CAGR)
- Hong Kong (24% CAGR)

In some markets, sustainable investment assets have declined in size. However, this is not unusual in markets where sustainable investment is practiced by a small number of investors. Similar patterns have been found in other regions such as Europe, whereby the loss of one fund or one investor can have a large impact on an individual market, so the growth figures in smaller markets should not be considered an indication of overall trends.

> Sustainable and responsible investing is fast becoming one of the most important investment criteria globally, and in Asia this trend is slowly but surely catching on. Moreover, sustainability is now also an important economic driver for investment performance. The challenge is the establishment and enforcement of consistent standards for sustainability disclosure in order to properly reflect true corporate performance.
>
> - David Li, Fund Manager, Impax

Table 2: Sustainable investment asset growth by market 2011-13

US$ millions	2011	2013	CAGR
Bangladesh	na	$14	nm
China	$1,535	$1,729	6%
Hong Kong	$7,328	$11,329	24%
India	$153	$115	-13%
Indonesia	$595	$1,142	39%
South Korea	$6,288	$8,426	16%
Malaysia	$9,956	$15,087	23%
Pakistan	$427	$505	9%
Singapore	$2,967	$5,660	38%
Taiwan	$724	$714	-1%
Thailand	$14	$20	19%
Vietnam	na	$195	nm
Asia	**$29,988**	**$44,937**	**22%**

Source: ASrIA, 2014

Understanding the role and impact of Islamic investment assets

The data collected for this Review includes assets managed consistent with Islamic law or Sharia principles (see endnote v for an overview). Whether or not to include such assets in sustainable investment analysis is subject to considerable debate. For the purpose of this Review, these funds are included on the basis that assets managed according to Sharia principles require additional screening to traditional asset management. In many instances, these funds have much in common with certain 'ethical funds' (e.g. exclusion of alcohol as used by many other funds based on religious principles).

Table 3 below summarizes the main countries with assets identified as Islamic or Sharia-compliant as a proportion of total sustainable investment assets. The majority of these assets are based on exclusionary or negative screening strategies. However, some are also identified as based on other strategies such as ESG integration.

Table 3: Proportion of Islamic assets in sustainable investment

	2013
Indonesia	99.14%
Malaysia	99.33%
Pakistan	100%
Asia (13)	**37.42%**

Source: ASrIA, 2014

What are the main characteristics of individual sustainable investment strategies?

The Review analyzed results from the asset data in conjunction with additional insights from the survey in order to understand certain characteristics of individual sustainable investment strategies. The following tables and graphs are constructed from the survey results.

> Investors are faced with information overload. What differentiates companies are the core values they profess. Pursuing sustainable strategies is the responsible thing to do, and those companies that do so, deserve investors' trust.
>
> - Andrew Kwek, Chief Executive Officer
> Pheim Asset Management

ESG integration – most commonly used strategy

ESG integration is the most common strategy used, in terms of total assets, with US$23.4 billion in assets - mostly from Hong Kong, South Korea and Singapore.

Responses to the survey show that 82% of respondents practice ESG integration, whereas 65% have a formal sustainable investment policy that covers the incorporation of ESG integration across assets.

67% of respondents who practice ESG integration ***systematically include ESG information*** *into standard financial analysis*

Table 4: ESG integration practice and policy (n=29)

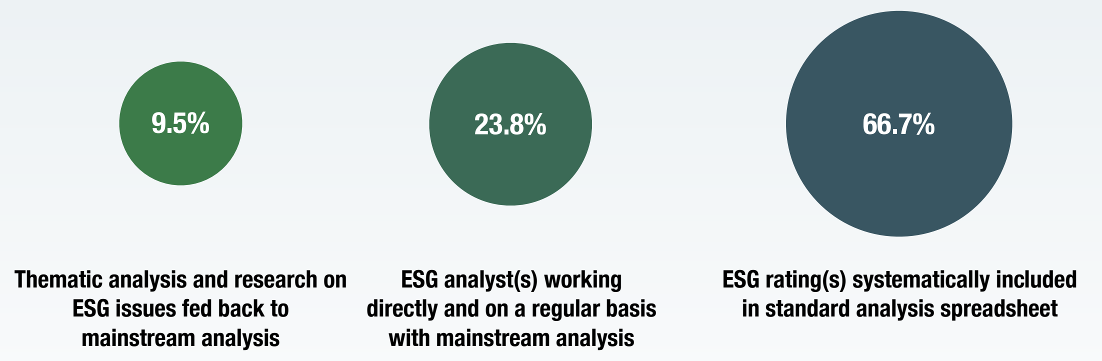
	Yes	No
Does your organization practice ESG integration?	82%	18%
Does your organization have a formal policy on ESG integration?	65%	35%

Source: ASrIA, 2014

The most common asset classes in which ESG integration is applied are listed and private equity, whereas it is less common in fixed income and real estate asset classes.

ESG integration is often categorized by three depths of analysis, as shown in Figure 2.[iv] Among respondents to the survey, the most common form of ESG integration is systematically including ESG ratings/information in standard analysis spreadsheets. Figure 2 shows that 67% of respondents who practice ESG integration systematically include ESG information into standard financial analysis.

Figure 2: ESG integration practices (n=21)



Source: ASrIA, 2014

Negative screening – influence of Sharia-compliant investing

Negative or exclusionary screening is the second largest strategy in terms of assets, accounting for US$16.6 billion in assets. There are a variety of ESG exclusions being applied to these assets. In Asia, by far the largest class of exclusion investments are Islamic or Sharia-compliant assets[v] covering US$16.2 billion. Such assets are primarily found in Malaysia, however with significant assets also present in Indonesia and Pakistan.

In Asia, by far the largest class of exclusion investments are ***Islamic or Sharia-compliant assets***

Sustainability themed strategies – climate change is a game-changer

Sustainability themed strategies are gaining momentum due to the rising importance of ESG issues such as climate change, energy and water security in the region. In addition, many countries in Asia are seeking to implement more supportive regulatory landscapes for environmentally-focused investments such as clean tech and renewable energy. This is having a positive impact on the sustainable investment market.

A large proportion of respondents (72%) take climate risk into account in investment decisions. While this in isolation is a strong indication that climate risk is important for investors, it is noteworthy that some of the respondents that do not have a formal sustainable investment policy take climate risk into account.[vi] Climate change is an issue for both dedicated sustainable investment managers as well as more mainstream asset managers.

Climate change is an issue *for both dedicated sustainable investment managers as well as more* ***mainstream*** *asset managers*

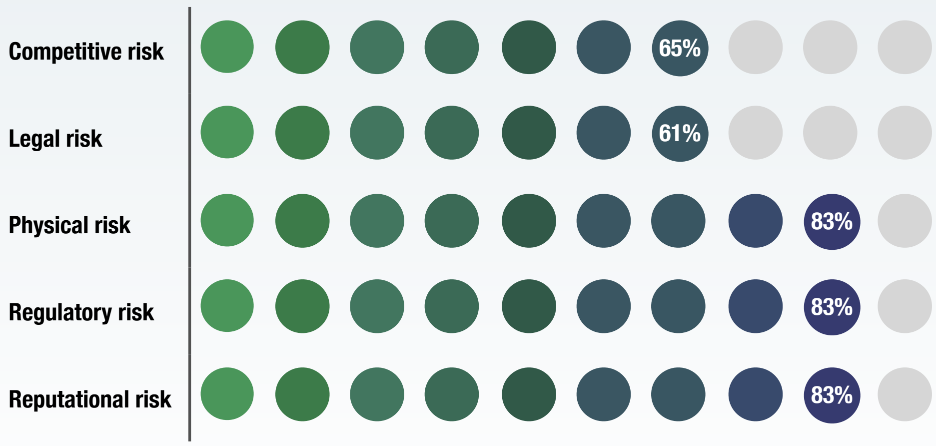
The climate risks that most concern respondents are (each scoring 83%):

- Physical risks
- Regulatory risks
- Reputational risks

Legal risk is currently seen as least important.

Figure 3: Climate risk type (n=23; multiple answers allowed)

What type of climate risks affect your organization's investment decision process? (Check all that apply)



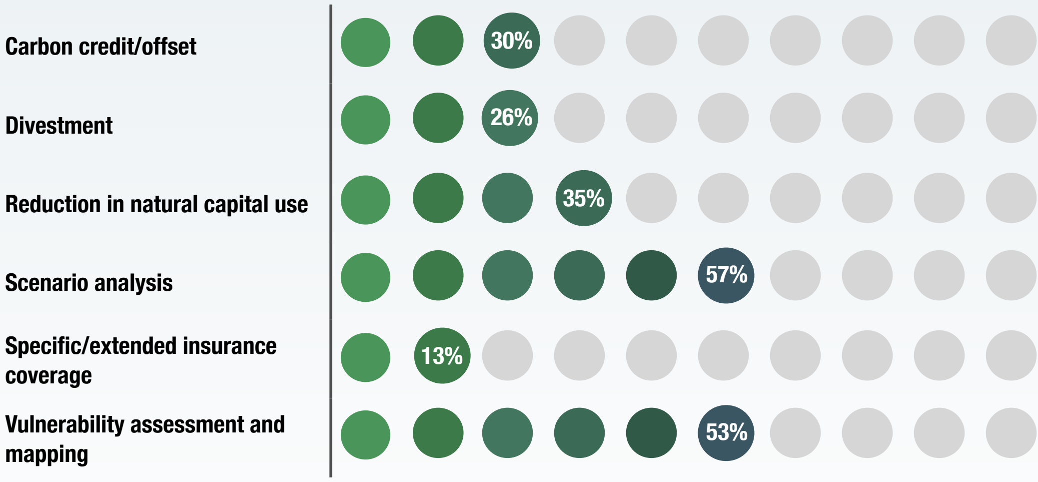
Source: ASrIA, 2014

The focus on physical risk is significant, as these present risks that will affect investors regardless of international policy response to the climate change challenge. It confirms the recognition that climate risk is growing and will affect all investments to a greater or lesser extent.

For investors that do take climate risk into account, the most common responses to the risk are vulnerability assessments and mapping, and scenario analysis. Direct investment responses such as divestment, offsetting and insurance cover are less common, as seen in Figure 4.

Figure 4: Climate risk response (n=19; multiple answers allowed)

How does your organization take climate risks into account in its investment decision process? (Check all that apply)



Source: ASrIA, 2014

In order for growth to be sustainable, economic development in Asia needs to be resilient to climate change. Capital should be deployed to promote corporate strategies that understand these risks and the management that practices good governance to protect long-term interests. Investors in Asia play a key role in determining where capital should go and their decisions now will have an impact for generations to come.

- Yulanda Chung, Director of the Board, ASrIA

Shareholder engagement – environmental and social issues becoming more important

The majority of survey respondents (79%) indicate that shareholder engagement is practiced. The most common forms of shareholder engagement are:

- Direct engagement conducted privately (73%); and
- Collaborative engagement, proxy voting and engagement of industry groups/policy makers (each scoring 47%).

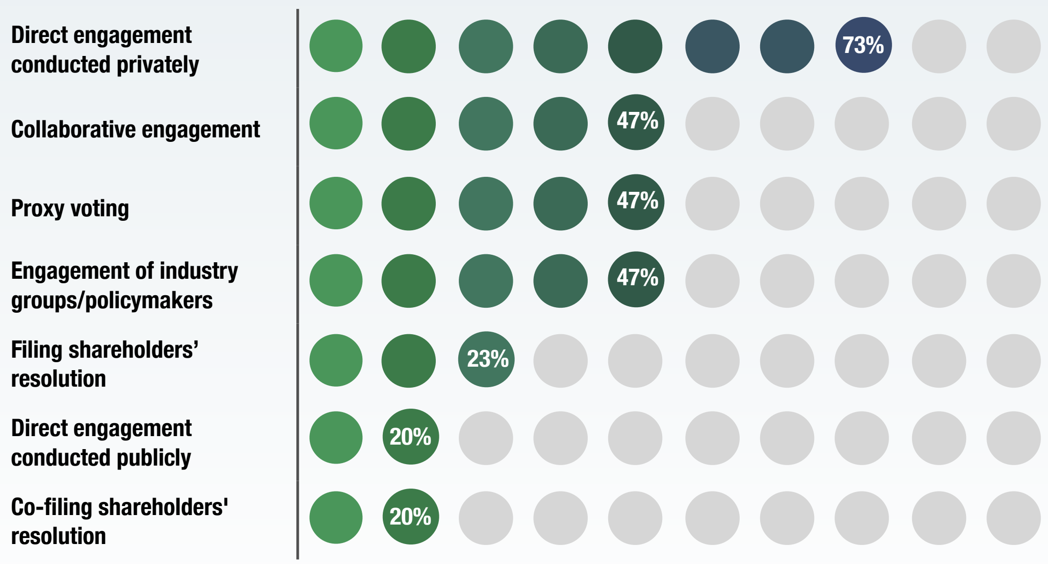
Traditionally, shareholder engagement and voting has focused on corporate governance issues. However, as environmental and social issues become important to a greater number of investors, this focus is shifting. The following table illustrates the distribution of engagement activities pursued according to ESG issues.

Table 5: Engagement activity by ESG issue (n=27; multiple answers allowed)

	Environmental	Social	Governance	n
Proxy voting	65%	71%	94%	17
Direct engagement activity (public and private)	88%	92%	96%	24
Collaborative engagement	79%	79%	93%	14
Filing or co-filing shareholders' resolution	57%	71%	100%	7
Engagement of industry groups/policymakers	80%	87%	80%	15

Source: ASrIA, 2014

Figure 5: Type of engagement and shareholder action (n=30; multiple answers allowed)

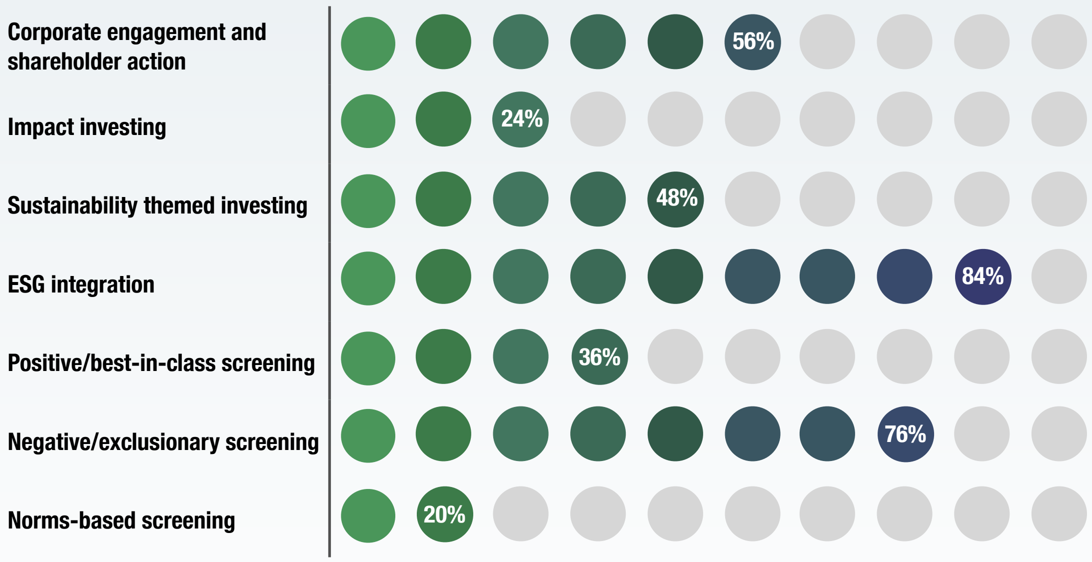


Source: ASrIA, 2014

Multiple ESG strategies – commonly used

Responses to the survey confirmed that many investors make use of multiple sustainable investment strategies in their investment approach. For example, an investor that practices ESG integration may also exclude certain sectors from the investible universe. While not captured in the data in order to avoid double counting of assets, the survey indicates there is significant overlap of strategies, especially for ESG integration, exclusions and corporate engagement.[vii]

Figure 6: Sustainable investment strategy (n=25; multiple answers allowed)



Source: ASrIA, 2014

Emerging characteristics of sustainable investment in Asia

> *Respondents are motivated by **financial reasons** rather than ethical or other concerns*

Motivations for sustainable investment in Asia

Fiduciary duty, financial opportunity and risk management were highlighted by survey respondents as the main motivations for sustainable investment. On this basis, the survey indicates that respondents are motivated by financial reasons rather than ethical or other concerns.

Table 6: Motivations for sustainable investment by class (n=33; multiple answers allowed)[viii]

	Not important	Neutral	Important	Rating average
Reputation/Brand image	3%	9%	88%	4.22
Legal and regulatory compliance	14%	10%	76%	4.03
Fiduciary duty/mandate	3%	0%	97%	4.52
Investment policy of organisation	0%	13%	87%	4.45
Financial opportunity	0%	6%	94%	4.48
Risk management	0%	7%	93%	4.53

Source: ASrIA, 2014

Looking at which sustainable investment strategies have a perceived positive, negative or neutral effect on risk-adjusted return, ESG integration is the strategy that most respondents view as positive (87%). This reaffirms that a key motivation is financial, as ESG integration is regarded as the strategy that sits closest to traditional fund management.

Table 7: Perceived effect of sustainable investment strategy on risk-adjusted return (n=33; multiple answers allowed)

	Not important	Neutral	Important	Rating average
Legislative drivers	10%	23%	67%	3.80
Materiality	0%	31%	69%	3.93
Demand from institutional investors	0%	0%	100%	4.57
Demand from retail investors	17%	21%	62%	3.62
Investment collaboration (ASrIA, UN PRI, others)	10%	17%	73%	3.70
External pressure (NGOs, media, trade unions)	10%	23%	68%	3.71

Source: ASrIA, 2014

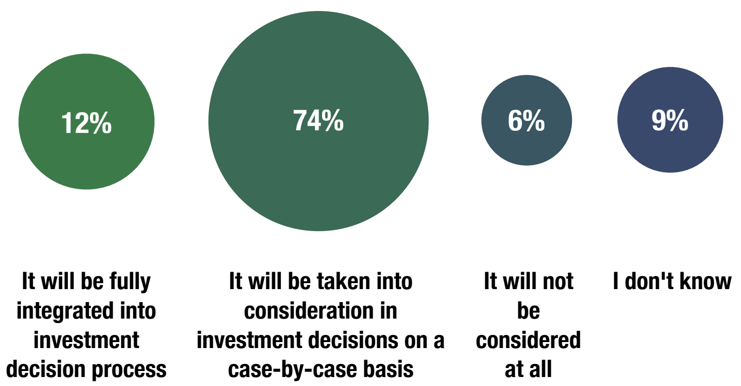
Some (26%) of the respondents do not have a formal sustainable and responsible investment policy. 40% of these respondents state that this is due to a lack of universally accepted standards to assess ESG risk or difficulty in quantifying ESG risk. No respondent stated that ESG risks have little or no impact on financial performance, indicating that barriers to further adoption are likely to be resource driven or technical (e.g. lack of disclosure) as opposed to stemming from a belief that ESG risks do not matter.

Asia's future growth – what are the key drivers?

Respondents are overwhelmingly of the opinion that investor interest in sustainable investment has increased since 2011 (85%), while 88% state that they expect growth over the next two years. Only 6% of respondents expect sustainable investments to decrease in the next two years.

> *Most respondents (62%) believe that **climate risks will become more important** in the investment process over the next two years*

Figure 7: Integration of natural capital valuation next two years (n=34)



While it is clear that climate risk is already high on the agenda of investors, there is no indication that it will become less so. In fact, most respondents (62%) believe that climate risks will become more important in the investment process over the next two years. No respondent indicated that it would become less important.

> *Beyond climate risk, **natural capital risk and valuation** is gaining attention among investors*

Beyond climate risk, natural capital risk and valuation is gaining attention among investors. However, respondents are less familiar with this type of risk compared to climate risk with most respondents (74%) stating that it will be taken into account but only on a case-by-case basis.

Table 8: Drivers of demand (n=33; multiple answers allowed)

	Negative effect	Neutral effect	Positive effect
Negative/Exclusionary screening	14%	41%	45%
Norms-based screening	7%	59%	33%
Positive/Best-in-class screening	4%	32%	64%
ESG integration	0%	13%	87%
Sustainability themed investing	0%	43%	57%
Impact investing	14%	38%	48%
Corporate engagement and shareholder action	0%	34%	66%

Source: ASrIA, 2014

Most of the new demand for sustainable investment will come from institutional investors, while legislative drivers and materiality are also seen as important. Least important is demand from retail investors, although one respondent notes that demand from high-net worth individuals[ix] will be important as the younger generations demand more sustainable investment options

CONCLUSION

Sustainable investment assets in Asia (ex-Japan) now stand at US$44.9 billion, representing a year-on-year increase of 22% since 2011. While this only comprises a small percentage of the funds under management in Asia, it is evident that there has been a positive growth in the sustainable investment industry over recent years. Survey respondents highlight fiduciary duty, financial opportunity and risk management as their main motivations.

The most commonly adopted sustainable investment strategies in Asia appear to be ESG integration at U$23.4 billion (52% of all assets) and exclusion/negative screening at US$16.6 billion (37% of all assets). The survey suggests that ~67% of respondents systematically integrate ESG relevant metrics in their analysis, which is a particularly positive development given the need for a greater level of issue awareness, and human and systems capacity in implementing such a strategy.

Islamic funds in Malaysia and Indonesia are a major contributor to net assets that adopt exclusion/negative screening, which – given this is a relatively simple strategy to adopt – could bode well for growth in this strategy in non-Islamic sustainable investment funds in countries where there has to date been little sustainable investment activity.

The number of sustainable investment funds identified is now around 500, representing a 24% increase compared to 2011. Although indicative, a closer look at the data shows 15% growth in the number of funds available over 2012-13, outpacing the 8% growth over 2011-12.

Perhaps not surprisingly, the region's major global financial centers (Singapore, Hong Kong and Seoul) and Kuala Lumpur (where the Malaysian government has been actively supporting development of the Islamic funds market for a number of years) – account for the majority of survey respondents and 90% of all reported sustainable investment assets.

Growth in net new assets was strongest in Singapore and Indonesia, and looking forward this trend might be expected to continue. In Singapore - given issue awareness (e.g. the impact of recent trans-boundary haze) and development of the state as a global wealth management hub; and in Indonesia - to meet the aspirations of a rapidly emerging middle class and replication of Malaysia's boom in Sharia-compliant investment products.

Sustainability themed funds are the fastest growing product segment, albeit from a low base, with a CAGR of 56% since 2011. The green bond market has also taken off globally during the past year, with issuances in 2014 estimated to be up to US$40 billion.[x] Given high levels of interest in climate change mitigation and adaptation among sustainable investors in Asia, and complementary national development policies, the prospects for green bond issuances and asset inflows into sustainability themed funds can be expected to be positive.

Products relating to impact investing and conservation finance both have room to grow in the region as investors look for values-oriented financial returns besides philanthropic endeavors. Furthermore, as the region attempts to address the massive challenges associated with climate change and environmental degradation, significant investment into clean energy industries will be required, the majority of which will need to come from the private sector.

2013 was an important year for sustainable investment in the region with significant green financing initiatives introduced by several governments including China and Indonesia; the issuance of Asia's first green bonds from the ADB and KEXIM; and widespread developments on ESG-related disclosure policies. Investors' growing concerns about sustainability issues, particularly on climate change, and sustainable investment returns form an important incentive for the development of the sustainable investment market in Asia in the coming two to three years.

Focus 1: Asia's clean energy markets - an investment priority[xi]

Asia's clean energy needs

According to Bloomberg New Energy Finance, more than US $250 billion is expected to be invested annually to build out Asia's clean energy infrastructure by 2030, with clean energy providing a third of the region's power generation. Yet total oil and coal use is also expected to increase, to fuel the region's energy needs for economic growth, leading to a significant rise in emissions by 2030 as well.

Asia's low-carbon transition challenge is anchored in China, where the largest energy consumer in the world is expected to increase its energy use by 60% in 2030. How China meets its energy needs will play a major role in how climate change will be curbed. South East Asia and South Asia's primary energy demand is projected to increase at 2.8% per year over 2010-2035, as against the projected world average growth rate of 1.5% per year.[xii]

Energy imports burden economies but structural shifts open opportunities

Many countries in Asia rely heavily on energy imports to address surging needs. For example, while Thailand must contend with insufficient domestic natural gas supply to meet its growth (approximately 50% of its primary energy supply in 2013 was imported), India still faces an acute supply-demand mismatch in its power needs – peak power deficit was 4.2% in FY 13-14. The Philippines estimates it will require a total capacity of 29,329 MW by 2030, nearly 70% more than current capacity.

Even though India and Indonesia both have substantial coal reserves, structural trends in their energy markets have opened major opportunities for alternative sources of power generation to increase their share of resource pools. While India expects coal to feature prominently as a major fuel in the next five years, with the 12th Plan aiming for an additional 88,000 MW of generation capacity[xiii], domestic availability for power generation has been steadily declining amidst an increasing industrial demand which is also influenced by the high cost of imported liquefied natural gas ("LNG").[xiv] Structural shifts are also occurring in Indonesia, where the country is currently reorienting energy production from primarily serving export markets to growing domestic consumption. The archipelago nation's declining oil production and rising domestic demand resulted in the country's exit from OPEC in 2009 and higher levels of petroleum imports to meet demand,[xv] and today, relies on oil to meet 44% of its energy needs, while gas accounts for 23%, coal 27% and renewable energy 6%.[xvi]

Recent strides demonstrate promise: Lessons learned and targeted policy tools point to the future

In addition to being an environmentally friendly source of power, clean energy from renewable sources can - and must - contribute significantly to the massive energy needs of the region. A number of countries are seizing this opportunity with regulatory reform and supporting policies intended to rapidly develop the market.

For example, the Philippines has added to its economic growth success story with major policy drives to support clean energy investment, following on the *Renewable Energy Act* of 2008, and ambitious targets set out in the *National Renewable Energy Program* 2011-2013 to triple the country's current renewable capacity to 15.3 GW by 2030.[xvii] New Feed-in Tariffs ("FITs") by the Energy Regulatory Commission were announced in 2013, and regulatory policies concerning the administration of FITs are forthcoming, along with rules for a national *Renewable Portfolio Standard*. As of 2013, the Philippines have developed almost 2 GW of geothermal capacity, making it the second largest generator of electricity from geothermal energy in the world.[xviii] In addition, the island nation has 3.5 GW of installed hydropower and 33 MW of grid-connected wind power.[xix] Developed renewable energy sources only account for a small fraction of the available potential, with an estimated 86 GW of wind and hydropower remaining untapped.

In India, technology for renewable energy based generation has matured rapidly and has gained an increased acceptance. Great strides have been made in building up clean energy capacity since 2007, up 300% since 2007 from 7,761 MW to 32,424 MW today. Authorities have deployed multiple policy tools to close the demand gap and tackle fuel shortages. For example, *Renewable Purchase Obligations*, which aim for 15% by 2020,[xx] are coupled with *Renewable Energy Certificates* ("RECs") program, a market-based flexibility mechanism.[xxi] Solar capacity reached a major milestone last year, adding 1 GW in 2013, driven by the *Jawaharlal Nehru National Solar Mission* program, launched in 2010, which aims to 20 GW of grid connected solar power by 2022. Grid-interactive renewable power projects based on wind power, biomass, solar and small hydro are mainly private investment driven, with favourable tariff policy regimes established by State Electricity Regulatory Commissions ("SERC"), and almost all renewable power capacity addition during the year has come through this route.

In the three years since 2010, Thailand has more than doubled its installed clean energy capacity, from 1,880 to 3,789 MW, driven by the Feed-in premium program (known as the "*Adder*") introduced in 2010. By the end of 2013, the country emerged as the clear leader in solar development in South East Asia with 823.5 MW installed. However, market analysts expect to revise projections given that some 178 license holders have not yet developed an aggregate 1,073 MW of capacity, and would need to accept an incentive reduction from the *Adder* program to the new Feed-In-Tariff regime, as of Q4 2014.[xxii] Although renewable energy now makes up 12.2% of total power capacity in Thailand (as of Q1 2014) – a sizeable jump from 8.9% in 2012 – far greater investment across all major renewable technologies will be needed to reach the ambitious 25% target set out in the *Alternative Energy Development Plan* ("AEDP") (2012–2021), launched in 2011.

Shaping Asia's clean energy markets

Asia's clean energy markets are driven by surging energy demand. But opportunities are further shaped by dynamic variables which include high levels of energy imports, supply-demand mismatches for base load or industrial use fossil fuels, the vast potential for renewable energy development, and varying levels of policy support for clean energy development.[xxiii] Although fossil fuels still account for the majority of energy generation worldwide, alternatives are playing an increasing role in energy market with several Asian countries developing incentive schemes specifically for renewable energy. This presents a major opportunity for investors keen to secure a foothold in the region.

Focus 2: Green bonds – growing interest across the region

The global green bond market has exploded and investor appetite has played a key role in signaling to policy-makers and the wider industry that there is a willingness to support financing the transition to a low carbon economy.

Yet the green bond market in Asia remains in its infancy. As in other regions, before the market can mature to a sufficient size and liquidity to operate as a re-financing tool, proponents must first address key investor concerns such as the risk of "green washing" and the potential misuse of proceeds.

First green bonds in Asia

In 2013, South Korea's KEXIM Bank issued the first green bond in Asia to raise capital for environmentally friendly projects. The KEXIM green bond was oversubscribed by an estimated US$1.3 billion on the original US$500 million issuance, and was a great success among global institutional investors with 21% going to Asian investors. Moreover, the Asian Development Bank (ADB) was the third leading development bank to have issued green bonds, totaling US$ 897 million.

More recently Taiwan's Advanced Semiconductor Engineering issued Asia's first corporate green bond - a US $300 million BBB offering that was six times oversubscribed, while the Development Bank of Japan became the first Japanese issuer of a green bond with their EUR250 million green property bonds over three times subscribed, underlining a clear and strong international investor demand for Japanese and Asian green bonds.

Growing momentum across the region

With Asia facing some of the worst effects of climate change, the development of a green bond market could provide an invaluable solution for regional policymakers looking to identify large scale financing mechanisms needed to support low-carbon growth and the development of non-polluting energy sources. While issuances in the region to date have been limited, dialogue and policy engagement over green bonds has grown at a national level.

Where next for green bonds in Asia?

The market for green bonds is nascent globally and in its infancy in Asia - demand for and issuance of green bonds in some countries is not expected to take off for some time. What is critical moving forward if the momentum and appetite for green bonds is to be sustained are solid foundations, helping ensure investor confidence and market credibility throughout.

In particular, investors in Asia must be confident that transparent green bond criteria are in place, that the certification and evaluation process is independent and that there is full disclosure and clarity around the use of proceeds linked to green bond issuances. Transparent and universally accepted and enforced standards will be critical in maintaining investor confidence and market credibility – this is especially important in a region like Asia.

In China, the government has decided that green bonds will be an important part of reform of China's financial markets. We've been working with two government task forces on the issue; we expect China to be the world's largest green bonds market in the next few years, driven by the government's green agenda and by citizen concern to see environmental issues addressed.

In India, the government's ambitious renewables, clean water and rail upgrade programs desperately need private sector capital - green bonds, supported by international financial institutions, will play an important part. There regulatory issues around inward flows of investment - but the government has indicated its willingness to address these. Last week saw the setting up of the India Green Bonds Market Development Committee, hosted by the Federation of Indian Chambers of Commerce, to make this happen.

In Indonesia, the government is working hard to develop an Islamic finance system around the country, and Green Sukuk to fund renewables and other green infrastructure are shaping up to be a key part of that. Malaysia has already started down this path.

The big question is when the giant bond markets of Japan will stir. Given that the green bond market started in Japan's uridashi retail sector, this is highly likely - but Japanese actors can be slow to start. The Development Bank of Japan recently issued a green bond in the European market - we hope it will prove to be the first swallow of summer.

- Sean Kidney, CEO & Co-Founder, Climate Bond Initiative

Focus 3: Conservation finance – opportunities emerging in Asian markets

Conservation finance is a form of impact investment directly or indirectly into an ecosystem – defined in this case as a collection of habitats and living species – for the long-term conservation of that ecosystem's biodiversity and services.[xxiv] Part of the financial investment remains within the ecosystem to enable its conservation (the 'impact'), and part is returned to investors.

The rate of economic development in Asia continues to create financial wealth, but the scale of development inevitably depletes natural resources, or 'natural capital'. Just as degraded or diminishing natural capital often corresponds to business risks (e.g. groundwater pollution or depletion), the opportunity exists to adjust business models to conserve or better utilize it. This optimization is the essence of conservation finance as an emerging investment theme of particular relevance in Asia.

Putting a price on nature

Over the past 40 years, half of the world's mammals, birds, amphibians, reptiles and birds have disappeared, primarily due to human activities resulting in habitat loss and degradation, and over-exploitation through fishing and hunting.[xxv] In Asia, notable examples include high rates of loss and degradation of natural forest in Indonesia and Cambodia[xxvi] and threats to coral reefs in Southeast Asia by overfishing.[xxvii]

Current funding for global conservation is estimated at US$52 billion annually[xxviii] with most of the US$10.4 billion generated by market-based activities coming from 'green commodities' produced in an environmentally sustainable way and that often carry associated certification (e.g. FSC timber or paper).

The supply of conservation finance, however, significantly lags behind the estimated annual global demand of US $300-400 billion.[xxix xxx xxxi] Although the need for conservation finance in developing Asia is substantial, private sector support is limited in part because philanthropic investments are directed towards causes such as improving healthcare and early childhood education that reflect the personal stories of many first generation high-net-worth (HNW) / ultra HNW (UHNW) individuals in the region.

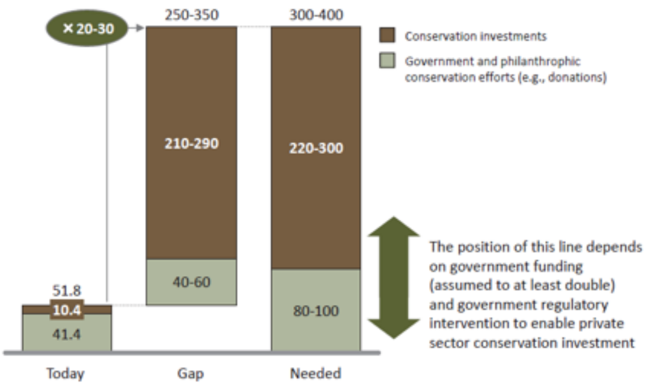
Assuming current public and philanthropic conservation efforts were to double, an annual funding gap of US$200-300 billion would still remain to satisfy global conservation needs.[xxxii]

> Asia's economic growth has created financial wealth, but at least 30 times more investment is needed to satisfy conservation needs. Reallocating just 1% of new and reinvested capital to emerging conservation finance opportunities will enable Asia's private investors to contribute to bridging the USD200-300 billion global funding gap.
>
> - Fabian Huwyler, Credit Suisse, Sustainability Affairs

Making conservation projects investable

Although both private and institutional investors have an appetite for conservation finance, investment opportunities do not yet exist at sufficient scale – partly due to limited investor awareness of potential financial and conservation returns. Banks and asset managers have an opportunity to incorporate conservation finance into their offerings by making the topic of conservation a fixed part of the advisory process and by developing new conservation-related investment products.

Scaling up conservation projects into investable programs requires a professional convening and management approach that fosters connectivity, sharing of best practice and rapid replication. Organizations experienced at financial management of large for-profit investment projects will have opportunities here and could make good use of expert NGO support. Local communities involved in such projects also often need to develop more business acumen and financial literacy to roll out projects at scale and be able to participate in their development.



Source: Credit Suisse, WWF, McKinsey & Company, 2014

Focus 4: Impact investing

The term impact investing is an umbrella term for investments in and lending to companies, entrepreneurs and projects that seek to generate measurable social and/or environmental impact by focusing on solving challenges or generating innovation. This can be alongside market-based financial return or sacrificing some return for positive impact. Investments transcend asset classes, and can be in the form of equities, bonds or other instruments. Impact investing can therefore mean different things to different people, and distinguishing it from other forms of sustainable investment especially sustainability themed investing can be challenging. It is distinct from philanthropy as investors take an ownership stake with the expectation of later being able to exit the investment, but many impact investors come from the philanthropic space and view it as a complement to their other activities. For example, in a framework developed by Bridges Ventures[xxxiii] impact first investments sit between philanthropy and sustainability themed investments. The European SRI Study 2014[xxxiv] provides a useful discussion on impact investing for interested readers.

Why impact investing?

In 2013, impact investing continued to be an important component of the global sustainable investment landscape. A report by J.P. Morgan and the Global Impact Investing Network (GIIN) surveyed 99 self-identified impact investors who planned to commit US$9 billion to impact investing in 2013.[xxxv] Furthermore, J.P. Morgan estimates that the impact investment market globally has the potential to absorb between US$400 billion and US$1 trillion over the next decade.

Asia bears significant potential for this growth in impact investing, with investors showing genuine concern for environmental, health and social challenges faced in the region. Some investors are becoming more strategic in incorporating impact investing into their investment portfolios.

Regional investors to take the lead?

The survey responses indicate that Asia-based investors have an interest in impact investing. As Figure 8 illustrates, the main motivation in Asia for engaging in impact investing as a strategy is because it is seen as a financial opportunity. Other important motivations include fiduciary duty/mandate and contribution to community and sustainable development.

The Rockefeller Foundation forecasts that Asia, especially Southeast Asia, will be the next hub for impact investing. The Foundation estimates that high-net-worth individuals in the region held US$10 trillion in combined assets in 2013 and it is estimated that assets under management in Asia Pacific will exceed US$16 trillion by 2020.[xxxvi] Provided suitable investments are made available, just 1% of these assets deployed in impact investing would make a significant difference. In many cases, it builds on the entrepreneurial tradition of creating value and the understanding that a business approach focused on return on investment, which may include environmental or social returns.

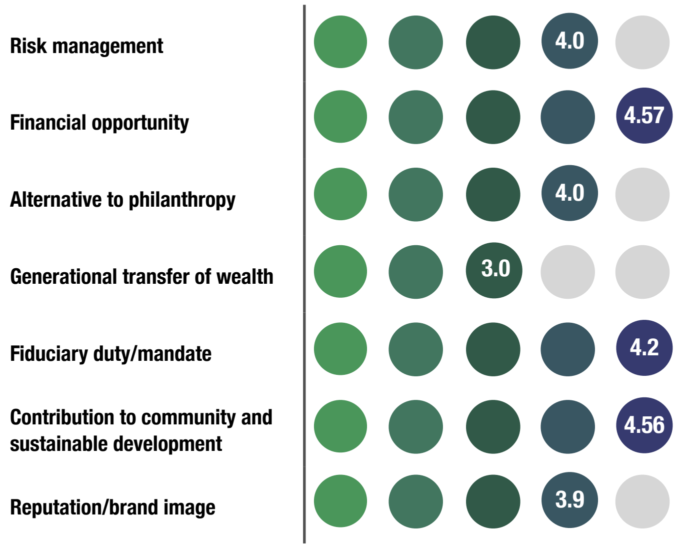
What is holding impact investing back in Asia?

With a clear need for more impact investing and a large number of potential investors the questions remains: why is impact investing not yet integrated into mainstream portfolios around Asia? Survey responses indicate a shortage of viable products as the main challenge, but the market is also restricted by limited amount of qualified advice and expertise.

> Both interest and products in the impact investing space have been growing. However, this hasn't translated into significant adoption by Asian asset owners. For families, institutions or pension funds, the biggest challenge may not be lack of will but lack of in-depth understanding or capacity. As a community, we need to invest more in growing this knowledge base and enhancing internal capacities to facilitate further growth in the sector.
>
> \- Katy Yung, RS Group, Director of Investment

Figure 8: Motivations for impact investing (n=12; multiple answers allowed)

What are the key motivations for your organization or your investors to engage in impact investing? (Check all that apply)



Source: ASrIA, 2014

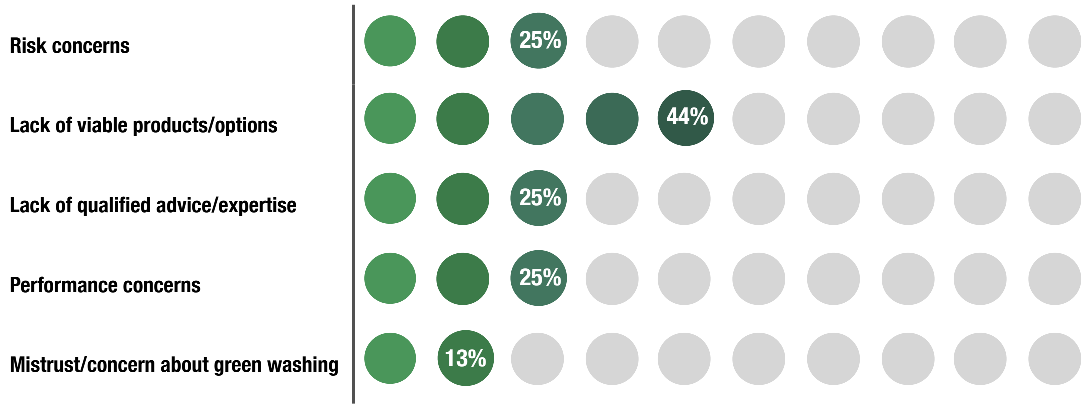
It is clear that Asia's impact investing market lacks a well-developed infrastructure, in addition to suitable investment opportunities. As elsewhere in the world, institutional investors are often challenged by the short-track record and limited data available to make well-informed investment decisions on potential opportunities.

What next for impact investing in Asia?

These obstacles can only be overcome with a holistic approach driven by market participants, regulators and investors. Investor education and awareness-raising is also important in Asia. Platforms to elevate the transparency and accountability during the investment cycle in order to improve the probability of a long lasting positive outcome are essential. Emerging platforms and collaborations to address these challenges include the Impact Investment Exchange (IIX), the Asian Venture Philanthropy Network and SOW Asia.

Figure 9: Barriers to impact investing (n=16; multiple answers allowed)

Why does your organization not engage in impact investing?



Source: ASrIA, 2014

The impact investing industry in China is very dynamic and energetic. Currently, the industry is at a concept introduction and platform setup phase, with many participants promoting the concepts of social enterprises, CSR and SRI. A range of organizations as well as dialogues are also being set up and introduced to the public. Sustainable and responsible investing is still clearly at a very early stage with few practices in China. However, with more promotion and the release of publications, I expect the field will pick up and show its value to society as a whole. Some of the drivers for development will be government support of environmental protection and clean-tech related projects, as well as its encouragement of social awareness and healthy lifestyles. Early stage angel and venture capital-type investments are still scarce, and so is institutional involvement in the secondary market. Yet the industry players are all confident that impact/responsible investing has great potential in China.

- William Wang, Managing Director, Avantage Ventures

MARKET HIGHLIGHTS

The following section presents highlights from a number of key markets in Asia, providing overviews of sustainable investment markets at a country level. This includes high-level updates on key policy and regulatory developments that have positively affected the industry, with additional comments on market dynamics and country level themes where useful.

The purpose of this section is to highlight a variety of national initiatives that contribute positively to the development of the sustainable investment market. Due to the differing stages of growth and national focus between markets, country briefs cover aspects identified to be important for the individual market. For example, in some markets green economy initiatives or corporate sustainability is the focus, rather than pure sustainable investment developments. This is often because national sustainable investment developments have not yet been initiated on a large scale.

This section is intended to provide a flavor of developments at the country level – where certain aspects are covered because they signal a national shift towards more sustainable growth models which, in turn, will likely drive demand for sustainable investment in the future. The country briefs are therefore not intended to provide a full report on all aspects relating to sustainable investment in that market.

China

China's green finance landscape is rapidly developing, but domestic ESG-themed sustainable investment products are nascent compared with the volume and maturity of direct investments in environmental protection and low-carbon sectors, and the momentum of green lending. Nevertheless, sustainable investments are gaining a foothold in the market and likely to experience rapid growth. As of the end of 2013, sustainable investment amounted US$1.7 billion, according to data collected for this Review.

The evolving ESG landscape in China

Since the mid-2000s, there has been a notable trend towards companies using corporate social responsibility (CSR) as a strategic management tool. Such developments have been much slower in the sustainable investment market with a degree of skepticism over the business case for better environmental, social and governance (ESG) risk management.

However, this is changing both with an improved understanding across the investment industry of ESG issues and criteria, but also due to a rapidly changing regulatory landscape requiring greater attention is given to ESG risks, particularly with regards to reporting and disclosure.

Important and influential role for China's main stock exchanges

Specifically, this is being driven by guidelines for listed companies on major exchanges or government imposed disclosure requirements for State-Owned Enterprises becoming more stringent and comprehensive. For example, since 2006, the Shenzhen Stock Exchange (SZSE) and the Shanghai Stock Exchange (SSE) have both implemented guidelines on corporate sustainability and ESG disclosure, the purpose of which has been to protect investor interests and promote investor confidence.

The Shanghai Stock Exchange – whose sustainability reporting requirements for listed companies are mandatory - also requires all listed companies to report on environmental protection activities *(Guidelines on Listed Companies' Environmental Information Disclosure by Shanghai Stock Exchange 2008)*. The SSE also provides a number of sustainability-related indices including the SSE Social Responsibility Index (launched in 2009) and the SSE Sustainable Development Index (launched in 2011).

Government takes the lead on green finance

Importantly, government leadership on broader financial sector reform is including efforts to develop and anchor the green finance landscape – and this is likely to promote growth in the sustainable investment market overall. Latest figures estimate that China needs RMB 2 trillion (3% of GDP) to be invested into green industry on an annual basis, with only 10-15% likely to be covered by government funds.[xxxvii]
This leadership was demonstrated in 2012, when the China Banking Regulatory Commission (CBRC) issued the *Green Credit Guidelines*. Following from the *Green Credit Policy* (2007), the guidelines require banking institutions to actively adjust credit structures and promote green credit practices, including the management of environmental and social impacts.

China's growing concerns about air pollution, land and water contamination and climate change offers the potential for driving green finance into its rapid financial market development. The People's Bank of China, through a Green Finance Task Force co-convened by the UNEP Inquiry into Design Options for a Sustainable Financial System, is currently exploring ways to accelerate green finance. Options under consideration include policy and regulatory interventions and standards that would advance green bonds, building environmental risk into credit ratings, establishing lender and investor liability for environmental pollution, and deploying green metrics, disclosure and indexes and benchmarks for use in public equities markets. Such design options, drawing on international experience, could influence China's capital markets and banks, although the pace and extent of such changes remains uncertain at this stage.

- Simon Zadek, Co-Director
Inquiry into the Design of a Sustainable Financial System
United Nations Environmental Programme

Following on from the guidelines, active dialogue across government departments, financial regulators and institutions and broader stakeholders has continued and escalated. At a recent meeting in November 2014, Dr Ma Jun, Chief Economist of the Research Bureau, People's Bank of China, stated[xxxviii]: "We believe that there is an urgent need to establish a green finance system in order to attract private capital into long term sustainable industrial development and clean energy and transport."

He added: "This requires innovative financial instruments such as green bonds and green insurance as well as information for investors and asset managers about environmental costs, risks and opportunities. The results could be not only greener industry, but more effective and efficient financial and capital markets overall."

The call for financial innovation – green bonds as an example

China's sustainable investment market is gaining strength and is likely to experience rapid growth, particularly in light of the government's increasing efforts to address the massive environmental and sustainability challenges facing the country.

Integral to this, the government is looking for opportunities to foster financial innovation to address these challenges. An excellent example can be found in current discussions on developing a green bond market in China. Further to the *Twelfth Five Year Plan* calling for [Promotion of] green development [and], speeding up the creation of a green financial system, in August 2013, the State Council announced the intention to grow a corporate green bonds market in the country.

This interest is being reflected in new products – for example, the Shenzhen Emissions Exchange recently launched China's first domestic green bond linked to the carbon market (May 2014). The bond was issued by a unit of the China General Nuclear Power Group raising up to US$162.8 million. Shanghai Pudong Development Bank and China Development Bank were assigned to market the financial product.

Sustainable investment market size

Table 9: Breakdown by strategy (in US$ million)

Strategy	**AuM as at 31/12/2013**
Negative/exclusionary screening	-
Positive/best-in-class screening	1,278
Sustainability-themed investing	451
Integration of ESG issues	-
Corporate engagement and shareholder action	-
Total	**1,729**

Source: ASrIA, 2014

Compared with mutual funds, the banking sector in China, supervised by the *Green Credit Guidelines*, plays a more significant role in sustainable finance. New products such as green bonds and green asset-backed securities are emerging. Risks related to air pollution and water scarcity are getting worse and generating material impacts to certain businesses.

- Peiyuan Guo, General Manager of Syntao Co Ltd and Co-Head of China-SIF

Hong Kong

Hong Kong has long been an attractive destination for institutional investors and alternative fund managers due to its friendly regulatory environment and an abundance of human talent. Hong Kong is the second largest sustainable investment market in the region – with US$11.3 billion in sustainable investment assets in 2013. However, despite the comparative size of the market, sustainable investment assets do not yet represent a significant portion of total assets under management.[xxxix]

ESG disclosure for local companies – a driving force for change?

In 2012, Hong Kong Exchanges and Clearing Limited (HKEx) introduced the *ESG Reporting Guidelines*, which have been subject to consultation since its publication. ESG reporting is currently on a voluntary basis. The next step would be to make reporting obligations on a 'comply or explain' basis but no decision has yet been taken.

Despite this, the introduction of the guidelines has progressed dialogue on ESG issues in Hong Kong, with HKEx focusing on capacity building across the market. This includes providing training to prepare issuers and investors for the forthcoming reporting obligations. However, the extent to which this will facilitate growth in the sustainable investment market remains to be seen.

Given that HKEx is Asia's second largest stock exchange in terms of domestic market capitalization,[xl] international and local institutional investors may be further attracted to the market when sustainability information is tracked, consolidated and disclosed in a much more systematic way. With the likes of Malaysia and Singapore also competing to become a regional hub for sustainable finance and investment, this is likely to become more relevant to Hong Kong.

Growth in demand to come from the retail sector? Changes to mandatory pension schemes

In 2012, the Mandatory Provident Fund (MPF) Authority[xli] introduced the *Employee Choice Arrangement*, providing employees with the option of transferring the employee's portion of their mandatory pension contributions and investment returns in their contribution account to a scheme of their choice. This is significant in that it will allow employees to choose their own contribution accounts offered by different financial institutions. Currently, awareness of sustainable investment is limited to the voluntary retirement scheme market, which is dominated by government and corporate retirement schemes. However, with the change in options available, the sustainable investment market could be driven by new retail demand from mandatory pension schemes.

Impact investing begins to take hold in Hong Kong

Hong Kong is well positioned to become a hub for impact investing, with the infrastructure and resources in place to create a favorable environment for this market to develop. An increased interest in impact investing appears to be driven by the emergence and influence of social enterprises. While currently there is no legal framework on social entrepreneurship, many social enterprises have been raising capital through equity investments, private debt or hybrid instruments and venture philanthropy.

However, some obstacles still remain, such as the absence of a platform for investor-project matchmaking, limited information sharing and cross-sector learning, as well as incoherent policies and guidelines.[xlii] However, initiatives such as the *Social Innovation and Entrepreneurship Development Fund* (SIE Fund) - set up in 2012 by the Hong Kong government - may help overcome some of the challenges that the industry faces.

Sustainable investment market size

Table 10: Breakdown by strategy (in US$ million)

Strategy	AuM as at 31/12/2013
Negative/exclusionary screening	27
Positive/best-in-class screening	85
Sustainability-themed investing	449
Integration of ESG issues	10,767
Corporate engagement and shareholder action	-
Total	**11,328**

Source: ASrIA, 2014

India

With one of the largest economies in Asia, the sustainable investment market in India has obvious growth potential. As of the end of 2013, sustainable investment assets amounted to US$115 million according to data collected for this Review.

Encouragingly, India is now enjoying a policy framework that provides prescriptive guidelines for responsible business practices, such as the *National Voluntary Guidelines for the Social, Environmental and Economic Responsibilities of Business (NVGs)* and the *Companies Act 2013*. It is considered that such broader policy developments may have a positive impact on the growth of the sustainable investment market.

Decline in sustainable investment assets

However, despite progress in some areas, India has experienced a slowing in recent years, with sustainable investment assets decreasing by 13% per annum from US $152 million in 2011 to US$115 million in 2013.

This decline can partly be attributed to slow growth in the country's economy and across the investment market more broadly. For example, investments in equity mutual funds fell for the sixth consecutive quarter in the second quarter of 2013, as average assets under management decreased by 5%. Moreover, the Indian stock market was relatively volatile in 2013 as below par economic indicators and stagnancy reforms led to a hostile investment climate overall.

A notable change has been in the providers of funds - prior to 2008, sustainable investment funds were offered mainly by global financial institutions. More recently, local institutional investors have begun to take the lead. For example, LIC Mutual Fund (part of the state-owned insurance group, Life Insurance Corporation of India (LIC)) and HDFC Group, a local bank, have both launched sustainable investment funds.

Corporate governance and transparency progress

Encouragingly, improvements in corporate governance and disclosure across the private sector have been made and this will feed into the sustainable investment market, with enhanced transparency providing investors with more options for ESG related information. For example, in 2008, Standard & Poor's launched the S&P ESG India Index. The index gives investors access to a liquid and also tradable index of 50 companies in India that fulfill certain ESG criteria.

In 2011, the Securities and Exchange Board of India (SEDI) mandated that listed companies report on ESG initiatives in their annual reports. This measure is aligned with the Ministry of Corporate Affairs' (MCA) guidelines entitled *National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business*, introduced the same year.

In 2013, the MCA introduced a new Corporate and Social Responsibility (CSR) policy under the *Companies Act 2013.* The new legislation requires companies with a net worth over US$82 million, turnover over US$164 million, or net profit over US$800,000 to set up a CSR committee within senior management. The committees are required to draft CSR policies and monitor CSR activities across the company.

The role of financial institutions – the need for more capacity in the sustainable investment market

In order for India's sustainable investment market to develop, there is a clear need – and opportunity – for the domestic financial sector to play a leading role. For example, in spite of government-backed recommendations, there have been limited advancements in the ESG practices of state-run pension funds or insurance companies. The private sector is only marginally better placed, with a small number of financial institutions providing structure to their ESG practices.

However, there are positive signs from individual actors within the sector. For example, YES Bank has developed a robust environmental and social risk framework as part of its responsible banking initiatives. In 2013, the Infrastructure Development Finance Company (IDFC) - India's leading integrated infrastructure finance player – signed on to the Equator Principles, becoming the first Indian financial institution to join the Equator Principles Association.

Target market for impact investors?

Impact investing in India is expected to have an increasing impact on the overall sustainable investment landscape. Impact investing is considered by many as one of the key drivers of private equity in the country. Intellecap (an India-based advisory firm focused on social enterprises) estimated that US$1.6 billion of capital has been invested in more than 220 impact enterprises across the country (as reported by the CFA Institute).[xliii] At present, the majority of capital is sourced from overseas. However, local investors are increasingly interested in impact investing as a defined investment strategy, with potential growth coming from institutional investors and high-net worth enterprises.

Sustainable investment market size

Table 11: Breakdown by strategy (in US$ million)

Strategy	AuM as at 31/12/2013
Negative/exclusionary screening	67
Positive/best-in-class screening	-
Sustainability-themed investing	2
Integration of ESG issues	46
Corporate engagement and shareholder action	-
Total	**115**

Source: ASrIA, 2014

India is in a favorable position to drive its sustainable investment and finance program, by making the most of the current policy environment and attention from the business community. Although the progress made on the disclosures front is exemplary, wider adoption of sustainable investment practices by the financial institutions continues to be a major challenge. Further enhancement of information quality and effective collaboration amongst champions across asset classes in driving best practices will be requisite for the next level.

- Sumantra Sen, Chief Executive of the Responsible Investment Research Association (RIRA)

Indonesia

Indonesia's sustainable investment market has nearly doubled since 2011, buoyed along by the country's significant economic growth over the past five years. As of the end of 2013, sustainable investment assets reached US$1.14 billion. However, as previously highlighted, the main strategy used in the Indonesian market is based on Sharia-compliance, where 99% of sustainable investment assets are defined as Islamic assets.

Strong foundations for further development?

Indonesia introduced legislation on corporate social responsibility in 2007, intended to improve local businesses' understanding and management of CSR issues. Further, in 2009, the Indonesia Stock Exchange in partnership with KEHATI, the Indonesian Biodiversity Foundation, launched the SRI-KEHATI Index, which raised investors' awareness of companies' environmental and social performance. Companies are judged in six areas - the environment, community involvement, good corporate governance, respect for human rights, business behavior and labor practices.

Government action on climate change and environmental issues – more is needed

The Indonesian government is recognizing that environmental degradation and climate change are representing significant threats to economic and social stability. This has been reflected in changes to policy frameworks – with progress toward a more sustainable growth path mainly driven by the *National Long Term Development Plan* (RPJPN 2005-2025) and the *National Medium Term Development Plan* (RPJMN 2009-2014).

Despite promising developments, investors continue to channel funds towards assets that maximize short-term risk adjusted investment returns, with environmental, social or governance considerations of less concern. For example, environmental themed investments represented only 1.37% (2013/Q1) of the portfolios of some of Indonesia's largest conventional and Islamic banks, surveyed by the Financial Services Authority (OJK).[xliv]

It is hoped that government policies will positively influence the trend towards more sustainable investment opportunities. For example, in 2009 the government established the *Indonesia Climate Change Trust Fund (ICCTF)*, the purpose of which is to pool and coordinate funds (including from the private sector and international donors) to finance the country's climate change programs. ICCTF provides an institutional mechanism for increased public-private collaboration and, whilst still relatively small, in 2013, it had a capitalization of US$11.4 million.[xlv]

Renewable energy in Indonesia – an investment opportunity not to be missed?

Blessed with an abundance of renewable energy resources, Indonesia's renewable energy market has huge potential – but remains largely undeveloped. The provision of significant subsidies for petroleum products is one of the primary reasons for this, essentially diminishing any impetus to develop a thriving alternative energy market. Renewable energy accounts for only 6% of the total final energy supply with a majority stemming from geothermal, hydro and biomass power.[xlvi] However, this is set to change - under Presidential Decree No. 5/2006, the government plans to increase renewable energy production to 17% by 2025.

Green finance as a driver for growth

Looking ahead, as noted, the Indonesian market will continue to be one the region's largest Islamic finance centers. However, the growth of green financing and investment is likely to catch up in the near future. With recent government initiatives and as the supporting infrastructure is put into place, this is likely to be a driving factor in the broader sustainable investment market forward.

Sustainable investment market size

Table 12: Breakdown by strategy (in US$ million)

Strategy	AuM as at 31/12/2013
Negative/exclusionary screening	1,101
Positive/best-in-class screening	3
Sustainability-themed investing	7
Integration of ESG issues	31
Corporate engagement and shareholder action	-
Total	**1,142**

Source: ASrIA, 2014

Malaysia

Similar to Indonesia, the majority of Malaysia's sustainable investment assets of US$15.1 billion come from Sharia-compliant products. Efforts are being made to promote ESG products with state-run funds leading support for a soon-to-be launched ESG Index, and pension funds are making moves towards integrating ESG principles in their investment activities.

Government action since the 1990s

Since the 1990s, sustainability concepts have been embedded in government initiatives and policies, beginning with *Vision 2020* introduced in 1991 and followed with the *National Integrity Plan* in 2004. Regulatory bodies have continued to strengthen corporate disclosure and adoption of sustainability practices - for example, the *Bursa Malaysia CSR Framework* in 2006. The *Corporate Responsibility Agenda* of 2009, introduced by the Companies Commission of Malaysia (SSM), was an attempt to instill CSR into Malaysian corporate culture with a focus on good governance. The *Business Sustainability Program*, launched by Bursa Malaysia in 2010, aimed to assist directors of listed companies in understanding the growing relevance of sustainability trends for their businesses.

ESG strategies – establishing Malaysia as a regional leader for sustainable investments

Malaysia's regional leading position in Islamic finance has also provided the country with a sizeable volume of sustainable investment, due to Islamic finance's inherent negative/exclusionary screening strategy. Sharia-compliant instruments make up the single biggest sustainable investment strategy within the country's total sustainable investment volume of US$15.1 billion, as of 2013.

> As a pioneer in Islamic Investing, Malaysia is well poised to take advantage of the responsible investing landscape. As Islamic fund managers have already implemented technology, processes and systems to handle negative screens, it will be easy for them to implement more positive screening in terms of environment, government, and social. Out of the nearly 1200 signatories to the UNPRI, very few, if any, local fund management companies are signatories. This speaks to a lack of understanding from both the fund managers and the investors as to the positive effects of ESG. This will only occur through education and outperformance, both of which take time.
>
> - Monem A Salam, President
> Saturna, Sdn, Bhd

As part of the efforts to attract global investors to its economy and capital markets, the government has committed to promoting Malaysia as a regional center for sustainable investment in South East Asia, through three key actions: establishing ESG products, launching dedicated investment funds, and adopting ESG principles for existing government-managed assets.

Due to launch in 2015, Bursa Malaysia believes that the ESG Index Series will provide the marketplace with a competitive advantage in the ASEAN region, giving global investors exposure to socially responsible companies.

Government leads the way with state-funded facilities

To seed demand and facilitate liquidity for new products, the government and regulators have also established facilities funded by the state budget. In late 2013, Valuecap Sdn Bhd (equally owned by Malaysia's state investors Khazanah, Permodalan Nasoinal Berhad (PNB) and civil service pension fund Kumpulan Wang Persaraan (KWAP)), announced its plans to launch RM1 billion in fund products for Bursa Malaysia's forthcoming ESG index.

Pension managers can make the biggest impact in sustainable fund flows

The country's pension managers, including KWAP and the Employee Provident Fund (EPF), have reportedly issued mandates focused on Sharia-compliant instruments and ESG investments, as part of diversification and fundamental-driven long-term strategies.[xlvii] As of 2014, it is also reported that a third of EPF's assets will be Sharia-compliant and next year, EPF will adopt ESG principles for various asset classes, beginning with fixed-income instruments. Given that KWAP and EPF are the two largest pension funds in Malaysia, any such mandates could significantly influence capital flows in the domestic sustainable investment market.

Sustainable investment market size

Table 13: Breakdown by strategy (in US$ million)

Strategy	AuM as at 31/12/2013
Negative/exclusionary screening	14,575
Positive/best-in-class screening	111
Sustainability-themed investing	-
Integration of ESG issues	401
Corporate engagement and shareholder action	-
Total	**15,087**

Source: ASrIA, 2014

Philippines

The Philippines market for sustainable investments is nascent in comparison with its peers. Information on sustainable investments is not readily available and, as such, it is difficult to find active and visible sustainable investors and ESG practitioners in the market. However, the Government of the Philippines and other market actors have recently undertaken several initiatives that serve the country's sustainable development needs, with a focus on infrastructure development that is sensitive to climate resilience and local community impact, and inclusive finance initiatives to improve access to finance for micro, small and medium enterprises (MSMEs).

Limited traction for ESG disclosure and investments

Corporate sustainability uptake appears to be limited to large or listed companies as well as financial institutions, which selectively undertake community projects, but most Philippines companies continue to focus primarily on financial profitability and growth.

ESG disclosure or assessment by investors is mostly accomplished through corporate governance reports and scorecards, mandated by the Philippines Stock Exchange's *Corporate Governance Guidelines for Listed Companies* in 2010, and the newer *Annual Corporate Governance Report* implemented by the Philippines Securities Exchange Commission in 2013.

First dedicated infrastructure fund aims to keep environmental and social impacts in check

The country launched its first dedicated infrastructure fund in 2013, the *Philippines Investment Alliance for Infrastructure (PINAI) Fund*, with financing from the Government Service Insurance System, the Asian Development Bank, Algemen Pensionen Groep of the Netherlands and Macquarie Group. An integrated Environmental Social Management System (ESMS) will safeguard impacts to the environment, involuntary resettlement, and indigenous peoples.

Major players focus on SMEs access to green finance

The Development Bank of the Philippines and Land Bank of the Philippines, two of the country's largest financial institutions, have introduced several green financing programs for industry, targeting small and medium enterprises (SMEs) and local government units. On the private side, the Bank of the Philippine Islands, in cooperation with the International Finance Corporation (IFC), offers a low-carbon investment program geared towards SMEs. This sector is likely to play an important role in developing a sustainable growth model for the country.

> Buoyed up by a rising economy, Philippine companies and financial institutions see sustainable investments as a new area for growth. Investments in low carbon and climate resilience projects as well as in clean technologies are gaining momentum. There is still a need however to create more public awareness on these initiatives, to mobilize more funds and to track their successes and pitfalls in order for these investments to continue to grow.
>
> -Octavio B. Peralta, Secretary General
> ADFIAP

Singapore

Singapore's sophisticated capital market has attracted a significant volume of sustainable investment in recent years. In 2013, sustainable investment assets reached US$5.7 billion, with ESG integration as one of the most promising strategies for the development of sustainable investment.

An ambitious model for sustainability

Singapore has built on a well-established history of sustainability in several aspects of its economy, from resource conscious urban planning, to building a regional hub for clean-technology companies, encouraging corporate disclosure, as well as allocating outward-bound sovereign assets to sustainable development needs.

In recent years, the city-state has built on its established credentials for world-class business infrastructure to promote itself as a 'living laboratory' for sustainable solutions, such as energy management and urban solutions, as well as a 'springboard' for global corporations and financial institutions to serve other markets in the region with technology and sustainable investment products.

National goals for a 'more liveable and sustainable future for Singaporeans' were first outlined in 2009's *Sustainable Singapore Blueprint*, and most recently updated for 2015, allocating SG$1.5 billion towards transportation, waste management, and smart technologies.

Mandating sustainability reporting – SGX keeping up the pace

Singapore has worked hard to keep pace with global trends to encourage corporate disclosure and ESG reporting, in line with efforts to continually enhance the quality of its capital markets and attract prospective investors.

In October 2014, the Singapore Stock Exchange (SGX) announced a long-awaited move mandating listed companies to publish sustainability reports on a 'comply or explain' basis. SGX officials have stated that their priority is to facilitate efficient capital markets, a broader goal than imposing tougher rules and regulations.

The mandate builds on the Monetary Authority of Singapore's (MAS)'s revised *Code of Corporate Governance* in 2012, which provided further principles and guidelines for corporate governance, including required disclosure, as well as the SGX's well-received 2012 Sustainability Reporting Guide. That same year, SGX also carried out a new program called *SGX Environmental Benchmark Insights* (SEBI), to assist listed firms assess carbon and environmental impacts.

In 2013, the SGX also proposed a Singapore Sustainability Index, intended to provide investors with more information on ESG performance of listed companies. However, to date, its implementation remains unclear.

Sustainable investment market size

Table 14: Breakdown by strategy (in US$ million)

Strategy	AuM as at 31/12/2013
Negative/exclusionary screening	94
Positive/best-in-class screening	21
Sustainability-themed investing	406
Integration of ESG issues	5,139
Corporate engagement and shareholder action	-
Total	**5,660**

Source: ASrIA, 2014

Responsible investment in Asia is still in its infancy, and Singapore has the potential to lead as a hub of sustainable business and innovation. Economic growth in this region is attracting more investors from outside Asia, but our experience is that in order to secure investment, asset managers and prospective portfolio companies must be able to demonstrate strong and tangible safeguards are in place in the areas of environmental and social impact and corporate governance. We believe such safeguards not only increase access to and reduce the costs of capital, but can also add commercial value at an enterprise level. By investing from a base in Singapore, we are able to be active in deal sourcing, due diligence and asset management and work closely with partners and other sustainable businesses to ensure these ESG issues are identified and managed within our investments in the region.

- Darius Sarshar, Director, Investments and Operations
New Forests Asia

Over the last few years, we have seen emerging market investors based in Singapore becoming more diligent on the environmental and social impact of their investments. As a private equity investor with an integrated approach to ESG, we hope to continue to set best practice benchmarks of using international standards in the clean energy sector throughout ASEAN. Portfolio companies we are working with understand the risk management benefits, but are sometimes challenged by the additional reporting requirements.

- Andrew Affleck, Chief Executive Officer
Armstrong Asset Management

South Korea

Sustainable investment in South Korea amounted to US$8.4 billion in 2013, with institutional investors dominating the market. The commitment by asset managers and owners to incorporate ESG issues in their investment decisions is particularly evident where the two main sustainable investment strategies employed are ESG integration, and corporate engagement and shareholder action.

South Korea – a pioneer for 'green growth' national development strategy

South Korea was among the first countries in Asia to embrace 'green growth' as a national development strategy. In 2009, the government introduced the green growth initiatives (the *National Strategy for Green Growth* (2009-2050) and the *Five-Year Plan* (2009-2013)), aimed at moving the country away from dependency on fossil fuels and an unsustainable use of resources, towards a low-carbon and resource efficient economy.

These green growth initiatives have become the blueprint of South Korea's low-carbon economy for the next 20 years, guiding the market to integrate sustainability considerations into strategic business decision-making, and encouraging companies to explore green business growth opportunities. A number of legislative developments, including new bills on mandatory disclosure of ESG information by listed companies, demonstrate policymakers' growing awareness of sustainability issues.

> Sustainable investment in South Korea is still in its infancy but two important trends are worth highlighting. The first one is that some pension funds, including the NPS, plan to increase the size of their sustainable investment year by year; and the second is that legislation for mandatory disclosure of ESG issues by listed companies is in progress, which means that the basic infrastructure will be in place sooner or later.
>
> -Karl Yang, Executive Director,
> Korea Sustainable Investing Forum (KoSIF)

Corporate governance concerns continue to constrain investors' outlook

Investors are still concerned by the quality of corporate governance in South Korean companies and the effect of the *Chaebol*[xlviii] structure on internationally ethical, transparent business practices needed for investor confidence. Regulators have made some moves to improve corporate governance standards. However, investors continue to face corporate governance related risks and recurring corporate scandals have affected companies' values.

The role and influence of pension funds in South Korea

The main institutional investors in the sustainable investment market are the Korea National Pension Service, the Korea Teachers Pension, the Public Employee Pension and the Korea Post. The size of these funds amounted to US$6.2 billion in 2013, of which sustainable investment assets amounted to US$1.5 billion. Overall, the portion of sustainable investments by pension funds increased to nearly 80% from 70% in 2012.[xlix]

Promising amendments to the National Pension Service (NPS), the fourth largest pension fund in the world, with assets of over US$400 billion, were proposed in the Korean National Assembly in April 2014. The bill, aimed at enhancing the NPS's control over their asset managers to increase the extent to which ESG issues are taken into consideration, comes as internal and external demands for expansion of the NPS's responsible investments are growing.

As the market's largest institutional investors, the potential influence pension fund managers can exert on corporate ESG issues and policies is significant. This is illustrated by the fact that, in 2013, US$1.16 billion of sustainable investment assets (approximately 15%) were invested using corporate engagement and shareholder action strategies.

Sustainable investment market size

Table 15: Breakdown by strategy (in US$ million)

Strategy	AuM as at 31/12/2013
Negative/exclusionary screening	109
Positive/best-in-class screening	170
Sustainability-themed investing	533
Integration of ESG issues	6,457
Corporate engagement and shareholder action	1,158
Total	**8,427**

Source: ASrIA, 2014

Taiwan

In 2013, sustainable investment assets in Taiwan amounted to US$714 million. ESG integration was the largest strategy employed by sustainable investors, accounting for US$565 million in assets, or 79% of all sustainable investment assets in Taiwan.

Leading with corporate social responsibility

The sustainable investment market in Taiwan has remained small relative to other markets in Asia. However, in recent years, the Financial Supervisory Commission of Taiwan (FSC) and other institutions have pushed for more transparency and better governance in corporate sustainability to facilitate the investment market.

Focus has been on improving corporate social responsibility practices. In 2006, the Taiwan Stock Exchange (TWSE) updated its *Corporate Governance Best-Practice Principles for Listed Companies* (CG Best-Practice). Listed companies were urged to stipulate the establishment of an ESG committee in the companies' articles of incorporation. Since 2008, listed companies have been required to report on their CSR systems and performance in the annual report. In 2010, the TWSE worked closely with Gre-Tai Securities Market (GTSM), the Taiwan Business Council for Sustainable Development, and the Taiwan CSR Institute to draft CSR best practice principles. In the same year, TWSE published the Ethical Corporate Management Best Practice Principles to offer companies listed on the TWSE and the GTSM a reference framework for incorporating a culture of ethical management.

In 2012, the TWSE launched the TWSE RAFI Taiwan Corporate Operation 101 Index (Taiwan CO 101 Index), which focuses on its constituents' corporate governance and ESG performance. Since its launch, the index has demonstrated superior performance than the leading tradable index and existing benchmark index in Taiwan.[l]

Local companies showing commitment to sustainability

The sustainable investment market is likely to be buoyed by the positive actions being taken by local companies, many of who are putting increasing emphasis on corporate sustainability across a wide range of areas. Indicative of this trend, KPMG's 2013 survey found that over half (56%) of the 100 largest companies by revenue reported on Corporate Responsibility.[li]

Furthermore, on the back of well-publicized scandals, in September 2014, the FSC required listed companies in the food, chemicals and financial sectors to issue CSR reports to improve transparency and understanding of their products and impact on society and the environment. With such emphasis being given to enhancing levels of disclosure and information, it is likely to have a positive effect on the investment market in Taiwan.

Sustainable investment market size

Table 15: Breakdown by strategy (in US$ million)

Strategy	AuM as at 31/12/2013
Negative/exclusionary screening	39
Positive/best-in-class screening	57
Sustainability-themed investing	53
Integration of ESG issues	565
Corporate engagement and shareholder action	-
Total	**714**

Source: ASrIA, 2014

Theme funds seem to be the main focus of responsible investment and have been attracting some attention in the Taiwan market. However, in practice the integration of ESG factors in investment decision-making is still at a very early stage. We need the authorities to take leadership on this.

-Niven Huang, General Manager, KPMG Sustainability Consulting Co., Ltd.

Thailand

Compared with other Asian markets, Thailand's sustainable investment market remains small with sustainable investment assets amounting to only US$20 million in 2013.[lii] This is despite a number of positive developments, including the Government of Thailand and regulators' efforts on corporate disclosure and Thailand's history of promoting investment in the green sector – for example, renewable energy and energy efficiency through its *Energy Conservation Fund (ENCON Fund)* established in the 1990s.

While the Government of Thailand has implemented a number of policies aimed at promoting both corporate sustainability and green investments, given the country's political instability, the outlook on regulatory and policy developments to support its sustainable investment market remains unclear.

Improvements on corporate disclosure

Encouragingly, Thailand's companies have made significant improvements in corporate governance practices in recent years. In 2012, the country was ranked 3rd in the Asia Corporate Governance Association's CG Watch,[liii] following Singapore and Hong Kong. The high ranking is attributed to improvements in auditing rules and corporate disclosure of listed companies.

The Stock Exchange of Thailand – taking the lead?

In another important development, the Stock Exchange of Thailand (SET) has launched several ESG initiatives recently. In 2011 the SET established the CSR Institute to improve responsible business behavior among listed companies, and this was followed in June 2012 with the release of guidance documents by the CSRI for listed companies.

Most recently, in August 2014, following the approval of a *Sustainability Development Framework* (included in the country's *11th National Economic and Social Development Plan* (2012-2016), SET stated it would develop a sustainability roadmap in 2015. It is also known that the stock exchange is actively developing Thailand's first ESG index. SET also plans on developing new products in response to the market interest on climate change and energy security themes, such as carbon credits and electronically traded funds (ETFs) focusing on companies using and investing in clean technology.

Sustainable investment market size

Table 15: Breakdown by strategy (in US$ million)

Strategy	AuM as at 31/12/2013
Negative/exclusionary screening	20
Positive/best-in-class screening	-
Sustainability-themed investing	-
Integration of ESG issues	-
Corporate engagement and shareholder action	-
Total	**20**

Source: ASrIA, 2014

Vietnam

A promising frontier market, Vietnam has the potential to be an important player in Asia's sustainable investment landscape, particularly as the economy grows and as sustainability practices at the corporate level begin to take hold. However, today the market is still in the early phase of development, with sustainable investment assets amounting to US$195 million, as of the end of 2013. Private investment vehicles into specific sustainable projects currently dominate the sustainable investment market in Vietnam. No retail funds have been identified.

Efforts to improve disclosure send positive messages to investors

Despite rapid economic growth and maturing capital markets, sustainable investors are facing restrictions to deploy capital to Vietnam. For example, it was recently reported that the government is delaying a plan to ease restrictions on foreign stakes. Weak governance and oversight, the lack of corporate transparency and a high level of regulatory uncertainty have prevented inflows of funds on a large scale. As with other countries in South East Asia, ESG disclosure and sustainability reporting is a very new area for Vietnam.

Efforts are being made to address this challenge. For example, the State Securities Commission of Vietnam has partnered with the International Finance Corporation (IFC) to release the *Sustainability Reporting Handbook for Vietnamese Companies*.[liv] In line with other emerging market initiatives, where governments, stock exchanges and investors are calling for improved corporate disclosure, Vietnam is likely to follow.

The need for climate finance – changing the landscape?

The growing understanding of the extent of vulnerability that Vietnam has to climate change is changing the investment landscape. Collaborative efforts between development finance institutions (DFIs), government agencies and the private sector are increasing, with a focus on developing long-term sustainability approaches and driving low-carbon investment plans. For example, in coordination with the Asian Development Bank (ABD), the Vietnamese government has developed an investment plan for low-carbon investments in the power, transport and industrial sectors, funded by the Climate Investment Funds' Clean Technology Fund (CTF). The fund financing is expected to mobilize investments from both the public and private sector to accelerate the country's progress toward its low carbon energy and development objectives.

Limited product availability but growth in private equity

Currently, there is limited product availability, particularly at the retail level with no sustainable investment retail funds offered in Vietnam. However, the private equity sector is increasingly active with a number of private equity funds deploying capital through sustainability-themed funds specifically focused on clean energy and environment sectors.

Sustainable investment market size

Table 15: Breakdown by strategy (in US$ million)

Strategy	**AuM as at 31/12/2013**
Negative/exclusionary screening	-
Positive/best-in-class screening	-
Sustainability-themed investing	195
Integration of ESG issues	-
Corporate engagement and shareholder action	-
Total	**195**

Source: ASrIA, 2014

GLOSSARY AND ACRONYMS

Asset manager: Organization or individual managing investments on behalf of a client.

Asset owner: Owner of investment managed by asset manager.

Best-in-class/positive screening: Investment in sectors, companies or projects selected for positive ESG performance relative to industry peers.

CAGR: Compound Annual Growth Rate.

Clean energy: Energy that does not pollute the atmosphere when used and includes forms of renewable energy such as wind, solar, hydro and geothermal heat.

Climate finance: The financing of public and private investment that is used towards climate change mitigation and adaptation projects and programs.

Conservation finance: Mechanism through which a financial investment is directly or indirectly made into an ecosystem – defined in this case as a collection of habitats and living species – for the long-term conservation of that ecosystem's biodiversity and services.

Corporate engagement and shareholder action: Investment strategy that employs shareholder power to influence corporate behavior through direct corporate engagement (i.e. communicating with senior management and/or boards of companies), filing or co-filing shareholder proposals, and proxy voting that is guided by comprehensive ESG guidelines.

CSR: Corporate Social Responsibility.

Divestment: When companies are sold from a fund portfolio because these investments no longer meet ESG criteria for that fund, or for purely financial reasons.

ESG: Environment, Social, and Governance.

ESG integration: The systematic and explicit inclusion by investment managers of ESG factors into traditional financial analysis.

Green finance: The financing of public and private investment that is used towards environmental goods and services, and the prevention, minimization and compensation of damages to the environment and climate. Green finance sits within the broader concept of climate finance.

GSIA: Global Sustainable Investment Alliance.

High Net Worth Individual: Individual with more that US$1 million in liquid financial assets.

Impact investing: Targeted investments, typically made in private markets, aimed at solving social or environmental problems. Impact investing includes community investing, or financing that is provided to businesses with a clear social and environmental purpose.

Institutional investors: Large professional investors including pension funds, insurance companies, investment companies, foundations, charities, public authorities and universities.

Islamic finance: Financing provided in accordance with Islamic law (Sharia).

Mandates/ Separate/ Segregated Accounts: Investment vehicles where investment policy is defined in cooperation with a unique investor.

Negative/exclusionary screening: The exclusion from a fund or portfolio of certain sectors, companies or practices based on specific ESG criteria.

Norms-based screening: Screening of investments against minimum standards of business practice based on international norms.

Retail investor: Non-professional investor.

Sustainable investment: An approach to investment where environmental, social and governance factors, in combination with financial considerations, guide the selection and management of investments.

SRI: Sustainable and Responsible Investment - a generic term covering sustainable, responsible, socially responsible, ethical, environmental, social investments and any other investment process that integrates financial analysis with the influence of environmental, social and governance (ESG) issues.

Sustainability-themed investing: Investment in themes or assets specifically related to sustainability (for example, clean energy, green technology or sustainable agriculture).

APPENDIX ONE - ADDITIONAL COMMENTS ON DEFINITIONS AND METHODOLOGY

Global Sustainable Investment Alliance – sustainable investment strategies and definitions

While differing definitions and categorizations exist as to what sustainable investment entails, those introduced by the Global Sustainable Investment Alliance (GSIA) - of which ASrIA is a founding member - in the Global Sustainable Investment Review in 2012 have emerged as an industry standard. These are:

1. Negative/exclusionary screening – the exclusion from a fund or portfolio of certain sectors, companies or practices based on specific ESG criteria.
2. Positive/best-in-class screening – investment in sectors, companies or projects selected for positive ESG performance relative to industry peers.
3. Norms-based screening – screening of investments against minimum standards of business practice based on international norms.
4. Integration of ESG factors – the systematic and explicit inclusion by investment managers of ESG factors into traditional financial analysis.
5. Sustainability themed investing – investment in themes or assets specifically related to sustainability (for example, clean energy, green technology or sustainable agriculture).
6. Impact investing – targeted investments, typically made in private markets, aimed at solving social or environmental problems. Impact investing includes community investing, microfinance and investments in businesses with a social or environmental purpose.
7. Corporate engagement and shareholder action – this strategy employs shareholder power to influence corporate behavior including through direct corporate engagement (i.e. communicating with senior management and/or boards of companies), filing or co-filing shareholder proposals, and proxy voting that is guided by comprehensive ESG guidelines.

Classification of sustainable investment assets

Consistent with the GSIA methodology, the review categorizes the domicile of sustainable investment assets primarily according to where the asset manager is located (or asset owner in the case of self-managed assets). Where this information is unclear or there are split management assets, classification is made according to where the investment products are distributed or where the products are domiciled.

Classification on sustainable investment strategies

Assets under management are classed according to one sustainable investment strategy only in order to ensure that there is no double counting of assets.

Survey coverage

Survey data is based on 40 responses, predominately from Hong Kong, South Korea and Singapore (61%), while other Asian responses came from China, India, Indonesia, Malaysia, Taiwan, Thailand and Vietnam. Over 400 institutions were invited to respond to the survey – these included institutions from ASrIA's supporter network and other actors identified as potential respondents to the survey. The national SIFs of Japan, South Korea and India also assisted in distributing the survey.

Review limitations

The report presents a best-effort overview of the market, but analysis likely underreports assets due to incomplete survey response rates, especially from asset owners. Furthermore, the review is limited by lack of asset data by impact investors, which are covered by the survey only.

Asset data are not directly comparable to the 2012 Asia Sustainable Investment Review. This is due to changes in the data collection methodology, which also affected the survey sample. Additional efforts have also been made to ensure that the data reported is actually managed in Asian countries, thereby bringing this review closer to methodology followed by the Global Sustainable Investment Alliance. In order to provide accurate growth data, this improved methodology is used to provide figures for 2011 and 2013.

The following investment strategies from the GSIA framework have not been covered in this review for the following reasons:

- Norms-based screening - while anecdotal evidence that asset managers in Asia use norms-based screening exists, it is not a strategy used widely enough to be reported by asset managers for the purpose of this review.
- Impact investing – while practiced in Asia, assets have not been accounted for in this review due to limited availability of reliable data. However, as an important emerging theme in Asia, the review includes a section highlighting recent developments and trends in impact investing in Asia.

Finally, country coverage in certain countries is limited by availability of information and local resources to compile data. Japan, which was included in the 2012 report, is not included in this review due to comparable data not being available at the time of compiling the review.

ENDNOTES

[i] The definition of sustainable investing and the strategies are taken from the Global Sustainable Investment Alliance (GSIA), *2012 Global Sustainable Investment Review.* ASrIA, like GSIA, uses an inclusive definition of sustainable investment, without drawing distinctions between this and related terms such as responsible investment and socially responsible investment.

[ii] Detailed definitions of the GSIA sustainable investment strategies are included in Appendix One.

[iii] In addition to these, Bangladesh and Pakistan are covered with asset data only.

[iv] See for example European SRI Study 2014 by Eurosif for an overview.

[v] The term "Islamic banking" refers to a system of banking or banking activity that is consistent with Islamic law (Sharia) principles and guided by Islamic economics. In particular, Islamic law prohibits usury, the collection and payment of interest, also commonly called riba in Islamic discourse.

[vi] 74% of respondents have a formal sustainable investment strategy.

[vii] This data is not weighted by assets, rather they are an indication of frequency of use by respondents to the survey.

[viii] Responses were collected on a five-point scale, but are shown in three-point scale by aggregating the two data points on each end of the neutral response. The average rating is calculated by assigning a score of 1-5 to the responses in accordance with the scale.

[ix] High-net-worth individuals (HNWI) are persons with more than US$1 million in investable assets.

[x] Climate Bond Initiative (2014), Bonds & Climate Change – The state of the market in 2014, July 2014. Available online: http://www.climatebonds.net/bonds-climate-change-2014

[xi] Content based on an article provided by Sindicatum Sustainable Resources'

[xii] Energy Outlook for Asia and the Pacific, Asian Development Bank, October 2013. Available online: http://adb.org/sites/default/files/pub/2013/energy-outlook.pdf

[xiii] Ibid.

[xiv] The Indian coal sector: Challenges and future outlook, Indian Chamber of Commerce, PwC India, November 2012.

[xv] Indonesia Overview/Data. Independent Statistics & Analysis. U.S. Energy Information Administration.

[xvi] Indonesia told to focus on renewable energy, The Jakarta Post, July 2013.

[xvii] National Renewable Energy Program, Depart of Energy, Government of Philippines. Available online: http://www.doe.gov.ph/microsites/nrep/index.php?opt=home

[xviii] Ibid.

[xix] Ibid.

[xx] *National Action Plan on Climate Change*, Government of India, Prime Minister's Council on Climate Change, June 2008.

[xxi] Ibid.

[xxii] Alternative Energy Development and Efficiency Department, November 2014.

[xxiii] Energy Outlook for Asia and the Pacific, Asian Development Bank, Oct 2013. Available online: http://adb.org/sites/default/files/pub/2013/energy-outlook.pdf

[xxiv] Convention on Biological Diversity (undated), Factsheet on Ecosystem Services. There are four broad categories of ecosystem services: provisioning services (e.g., medicinal plants), regulating services (e.g., flood control), cultural services and supporting services (e.g., soil formation).

[xxv] WWF-International (2014), Living Planet Report 2014.

[xxvi] Food and Agriculture Organization (2010), Asia-Pacific Forests and Forestry to 2020.

[xxvii] World Resources Institute (2011), Reefs at Risk Revisited.

[xxviii] Global Canopy Programme (2012), The Little Biodiversity Finance Book 3rd Edition.

[xxix] Gutman, P. (2010), World Conservation Magazine – July 2010 edition.

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[xxxi] James, A., Gaston, K. & Balmford, A. (2001), Can we afford to conserve biodiversity? Bioscience, 51, 43-52.

[xxxii] Credit Suisse, WWF, McKinsey & Company (2014), Conservation Finance - Moving beyond donor funding toward an investor-driven approach.

[xxxiii] Bridges Ventures (2012), Bridges Ventures & Impact Investing: An Overview, p. 3.

[xxxiv] Eurosif (2014), European SRI Study, p. 22s.

[xxxv] J. P. Morgan and The GIIN, Spotlight on the Market: The Impact Investor Survey, May 2014.

[xxxvi] Brandenburg, M., Southeast Asia is the Next Hub for Impact Investing*, The Rockefeller Foundation*, 22 March 2013. Available online: http://www.rockefellerfoundation.org/blog/southeast-asia-next-hub-impact.

[xxxvii] UNEP, press release, 17 November 2014. Available online: http://www.unep.org/inquiry/Portals/50215/Documents/UNEP%20Inquiry%20PR%20Beijing%20Nov%2017%202014%20_2.pdf

[xxxviii] Ibid.

[xxxix] According to the Hong Kong Securities and Futures Commission, total AuM in Hong Kong as of the end of 2013 is HK$ 16 trillion (US$2 trillion). Securities and Futures Commission (SFC), Fund Management Activities Survey 2013, July 2014. Available online: http://www.sfc.hk/web/EN/files/ER/Reports/2013%20FMAS%20Report.pdf

[xl] World Federation of Exchanges (WFE) 2014. WFE is a trade association of 64 publicly regulated stock, futures and options exchanges. WFE shall not be liable for any claims or losses of any nature arising directly or indirectly from use of the data.

[xli] The Mandatory Provident Fund (MPF) scheme, implemented by the government in 2000, is a compulsory saving scheme (pension fund) for Hong Kong Retirees. Employees and employers are required to contribute monthly to a MPF provided by financial institutions, according to their salaries and the period of employment.

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[xliii] Bayron, H. (2014). Impact Investing in India: Poised to Grow? *CFA Institute*. Available online: http://blogs.cfainstitute.org/investor/2014/07/07/impact-investing-in-india-poised-to-grow/

[xliv] OJK (2014), Technical advisory for financial institutions on sustainable banking through mobilizing market resources, solutions and tools. Available online: http://firstforsustainability.org/media/EdiSetijawan-IndonesiaBankingArchitectureDepartmentofBankingResearchandRegulation-SBN2014.pdf

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[xlviii] Chaebol can be translated in English as "conglomerate".

[xlix] SRI Korea report 2014.

[l] World Federation of Exchanges. Available online: http://www.world-exchanges.org/news-views/twse-launches-corporate-social-responsibility-index

[li] KPMG Survey of Corporate Responsibility Reporting 2013. Available online: www.kpmg-survey-of-corporate-responsibility-reporting-2013.pdf

[lii] The data presented in the review may not provide a full representation of the market due to limited availability of data.

[liii] Gill, A., Allen, J., and Yonts, C. Corporate Governance Watch 2012 , A joint publication from the Asian Corporate Governance Association and CLSA Asia-Pacific Markets (2012). Available online: http://www.acga-asia.org/public/files/CG_Watch_2012_ACGA_Market_Rankings.pdf

[liv] International Finance Corporation (2013), Sustainability Reporting Handbook for Vietnamese Companies. Available online: http://www.ifc.org/wps/wcm/connect/4d3262004f09068ca976eb3eac88a2f8/vietnam_sustainability-reporting-handbook.pdf?MOD=AJPERES