Sustainable Stock Exchanges Initiative

SUSTAINABLE STOCK EXCHANGES

A Report on Progress

A Paper Prepared for the Sustainable Stock Exchanges 2012 Global Dialogue

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A Report on Progress

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Note

This report is intended as a basis for discussion for participants of the Sustainable Stock Exchanges 2012 Global Dialogue. The opinions expressed, and the designations and terminology employed in the report, are the sole responsibility of Responsible Research. The contents of the report do not necessarily reflect the official views of Aviva Investors, the Principles for Responsible Investment as an organisation or its signatories, the UNGC, the UNCTAD Secretariat or its member States.

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FOREWORD

Paul Abberley: Chief Executive, Aviva Investors London

In 2008 the financial crisis prompted Alain Dromer - the Chief Executive of Aviva Investors - to call for a debate with stock market listing authorities on corporate disclosure of material sustainability information. Aviva Investors' call to action mobilized a number of other investors and civil society groups, and inspired what has become a major United Nations initiative.

In 2009, the first Sustainable Stock Exchanges (SSE) global dialogue was opened in New York by UN Secretary General Ban Ki-moon and featured approximately 100 leaders from institutional investors, stock exchanges and regulatory bodies. The SSE was a product of collaboration between various UN and UN related organizations working on responsible investment, ESG disclosure and corporate sustainability.

Aviva Investors has been involved with the SSE initiative from its beginning and I would like to take this opportunity to commend the United Nations for its outstanding work on sustainable investment issues. The SSE initiative has now grown in impact and scale to the point where it has become a global gravity centre for high-level debates on sustainable capital markets.

Aviva Investors is proud to support the work of the SSE organizers: the United Nations-backed Principles for Responsible Investment (PRI), the United Nations Conference on Trade and Development (UNCTAD), the United Nations Environment Programme Finance Initiative (UNEP-FI), and the United Nations Global Compact (UNGC). Without their diligence, professionalism and expertise, there is simply no way that this sustainable investment initiative would have reached the point where the core ideas could take the form of an international agreement at the United Nations Conference on Sustainable Development in Rio later this year.

Due to positive response at the 2009 event, the SSE dialogue continued in September 2010 in Xiamen, China (as part of UNCTAD's World Investment Forum) where the event was opened by Chairman of the China Securities Regulatory Commission, Mr. Shang FuLin. At this 2010 dialogue, I was privileged to help launch the first report in this series - Sustainable Stock Exchanges: Real Obstacles, Real Opportunities. The 2010 report discussed critical issues such as the balance between voluntary exchange-led initiatives and regulation as well as the roles of exchanges, investors and regulators.

In 2011, as a result of its dialogues within the SSE initiative, Aviva Investors convened the Corporate Sustainability Reporting Coalition. This coalition now includes over 40 organisations, primarily institutional investors, managing in excess of US$1.6 trillion. Members of this coalition **are urging all nations at the Rio+20, United Nations Conference on Sustainable Development, to commit to develop a Convention fostering the development of national measures requiring, on a comply or explain basis, the integration of material sustainability issues within the corporate reporting cycle of all listed and large private companies. We would also welcome effective accountability mechanisms, including for instance the presentation of the report or the explanation for its absence to the AGM.**

Among the options for national delivery would be changes to company law, a separate statute requiring such disclosure, the development of a code, and – of course – changes to stock market listing rules. A full list of coalition participants at the time of writing is included in Appendices (page 43) later in this report. I was pleased to be able to launch this coalition at the 2011 Private Sector Forum of the UN General Assembly, which was organised by the UN Global Compact.

This report is our next major contribution to this debate and I strongly welcome its findings. As ever, working with Responsible Research has been an exceptional experience and they have our gratitude for another job well done. The report clearly demonstrates that there has been some very welcome recent progress on this agenda from a number of stock exchanges and their regulators – notably Brazil, Singapore, Malaysia and India. It also highlights that the vast majority of exchanges would support an international policy framework on sustainability reporting. I could not agree more.

Markets are driven by information. If the information they receive is short term and thin then these characteristics will define our markets. As a founder member of the UN-backed Principles for Responsible Investment we have long believed that consideration of environmental, social and governance (ESG) issues are relevant to firm-level performance.

For our part, we have committed to integrate ESG data into our buy, sell, and hold investment decisions, into the feedback we transmit to the companies that we invest in, and into our voting at company AGMs.

There remains however, a significant data gap. We believe that the world now needs to move from the innovative and pioneering approach of a minority of companies to sustainability reporting being a true global mainstream practice for all large or listed companies.

This is why I look forward with great anticipation to the debate in Rio later this year.

To learn more about the SSE initiative, please visit: www.SSEinitiative.org

To learn more about our CSRC, please visit: www.aviva.com/earthsummit2012

Sustainable Stock Exchanges Initiative

Sustainable Stock Exchanges 2012 Global Dialogue

18 June 2012 / Windsor Barra Hotel / Rio de Janeiro, Brazil

The **Sustainable Stock Exchanges 2012 Global Dialogue** provides a unique, high-level platform to explore how the world's exchanges can work together with investors, regulators and companies to enhance corporate transparency and performance on ESG (environmental, social and corporate governance) issues.

Building on previous SSE dialogues in New York (2009) and Xiamen, China (2010), this event will focus on the role of the world's exchanges in encouraging responsible, long-term investment and creating sustainable financial markets.

The SSE 2012 will take place in the days leading up to the United Nations Conference on Sustainable Development (or "Rio+20"), as part of the UN Global Compact's **Rio+20 Corporate Sustainability Forum** (CSF). The CSF takes place from 15 to 18 June.

Participants of the SSE 2012 are invited to attend the **Rio+20 CSF**, which will feature an **Economics and Finance of Sustainable Development** track. We invite you to visit the Forum website – www.compact4rio.org – which will be updated regularly with information on the programme, partners and related events in Rio.

Registration

The SSE 2012 is an invitation only event for senior policy makers, regulators, stock exchange officials, institutional investors and other key stakeholders. There is no fee to participate in the SSE event.

The CSF is an invitation only event, where fees may apply. CSF participants are encouraged to register as soon as possible to take advantage of early registration rates and secure hotel accommodations that have been pre-reserved.

If you are interested in attending either the SSE 2012 or the SSE 2012 in conjunction with the larger CSF event, please request an invitation by emailing:

Danielle.Chesebrough@unpri.org.

Global sustainability challenges are enormous. Rio+20 provides a chance to change course and move toward a more sustainable future. The world needs your dedication, expertise and commitment. Join other capital market leaders in Rio this June.

For more information please visit: www.SSEinitiative.org

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ABOUT SUSTAINABLE STOCK EXCHANGES

Named by Forbes magazine as one of the "World's Best Sustainability Ideas" and a finalist for the 2011 Katerva Sustainability Award, the Sustainable Stock Exchanges (SSE) initiative is aimed at exploring how exchanges can work together with investors, regulators, and companies to enhance corporate transparency, and ultimately performance on ESG (environmental, social and corporate governance) issues. Please see Apendices for a brief description of typical corporate ESG issues considered by investors.

The SSE initiative is a joint project organised by the United Nations-backed Principles for Responsible Investment (PRI), the United Nations Conference on Trade and Development (UNCTAD), the United Nations Environment Programme Finance Initiative (UNEP-FI), and the United Nations Global Compact (UNGC).[1] In November 2009, the first SSE dialogue was launched by UN Secretary General Ban Ki Moon in New York and featured approximately 100 leaders from institutional investors, stock exchanges and regulatory bodies. The SSE dialogue continued in September 2010 in Xiamen, China (as part of UNCTAD's World Investment Forum) where the event was opened by the Chairman of the China Securities Regulatory Commission. At this 2010 dialogue, the first report in this series, *Sustainable Stock Exchanges: Real Obstacles, Real Opportunities*, was launched. The 2010 report discussed critical issues such as the balance between voluntary exchange-led initiatives and regulation as well as the roles of exchanges, investors and regulators.

To learn more about the SSE initiative, please visit: www.SSEinitiative.org

THE GLOBAL COMPACT

UNEP Finance Initiative
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ABOUT THIS REPORT

This report aims to capture the progress on promoting corporate sustainability made by the world's largest exchanges and exchange holding companies since 2010. The report seeks to inform the dialogue between exchanges, investors and other stakeholders during the SSE global dialogue on 18 June 2012, a pre-event to the UN Conference on Sustainable Development (a.k.a. the "Earth Summit"), to be held in Rio de Janeiro, Brazil.

In the draft negotiating text for the Earth Summit, entitled "The Future We Want", UN Member States are considering "a global policy framework requiring all listed and large private companies to consider sustainability issues and to integrate sustainability information within the reporting cycle".[3] Born out of the SSE initiative, a *Corporate Sustainability Reporting Coalition (CSRC)* led by Aviva Investors and comprising over 40 organisations (primarily institutional investors) managing in excess of US$1.6 trillion, supports this draft text. The CSRC is appealing to UN members to adopt at Rio "a binding international commitment to develop national regulations which mandate on a comply or explain basis the integration of material sustainability issues in the Annual Report & Accounts; and which provide effective mechanisms for investors to hold companies to account on the quality of their disclosures".[4]

This report therefore explores efforts made by stock exchanges towards increasing ESG transparency, developing systems or policies that make issuers accountable for such disclosures, as well as aspects of comparability across markets that may be embedded into such initiatives. It also considers market circumstances and factors that enable or dissuade stock markets from taking their first or further steps on this path. The report is informed by responses to a survey of 27 of the largest exchange entities across the world's markets. It is also strengthened by in-depth interviews with market experts, representatives of stock exchanges and investor groups, as well as a review of recent publications in this area.

I. EXECUTIVE SUMMARY

The 2010 report "*Sustainable Stock Exchanges: Real Obstacles, Real Opportunities*" surveyed 30 major global stock exchange entities on the breadth and depth of their existing sustainability initiatives. This follow-on work, 'A Report on Progress', has, as its title suggests, revisited the same exchange[i] entities with a deeper survey to gauge what advances have been made in the understanding and management of sustainability impacts by the exchanges. Encouragingly, one obvious improvement has been the response rate the survey achieved from exchanges: 78 percent in 2012 compared to 53 percent in 2010.

Progress has been made in some – but not all – areas during the past eighteen months (the survey results can be seen on pages 14 to 37). It is clear, however, that in an increasingly global and competitive market for stock exchanges, there are natural limits to what exchanges can do, given the nature of their relationship with their regulators. Investors and policy makers now need to understand these limits better so that their dialogue with exchanges and regulators will be more targeted and effective.

This section highlights some key findings and conclusions of this report. Suggested next steps for this initiative for investors, regulators and exchanges, as well as for policymakers, are also presented.

Stock exchanges reaffirm commitment to corporate responsibility and sustainability initiatives

Stock exchanges have overwhelmingly reaffirmed that they have a responsibility to encourage greater corporate responsibility on sustainability issues: three quarters of the respondents to the survey questionnaire supported this view (about the same proportion of respondents in the 2010 survey). This strong conviction is reflected in the advances made by exchanges in including provisions of guidance or encouragement of sustainability disclosure by issuers, the proliferation of sustainability indices and the transition of voluntary disclosure requirements to a stricter "comply or explain" basis in some markets. In another positive finding, more than half of the survey respondents indicated that their exchanges had already provided guidance to issuers on global sustainability reporting initiatives or materiality of sustainability issues to encourage improved ESG disclosure.[ii] The detail and mandate of such guidance varies significantly. Finally, in one of the most significant and convincing responses, 86 percent indicated that they either already had or were planning to launch sustainability indices of their own.

Investors need to create and clarify market demand

The call for greater and improved ESG disclosure has been principally led by institutional investors. While the stock exchanges surveyed indicated that institutional investors were generally supportive stakeholders of their sustainability initiatives, nearly half of the respondents also cited investor ambivalence as a factor that discouraged exchange officials from further action. This suggests a threshold of support that needs to be exceeded for true progress to be made. Qualitative discussions with exchanges as well as other research evidence suggest that in some cases, exchanges may have misinterpreted investor demand as a demand for sustainable products. However, exchanges pointed out that investors had not significantly rewarded/punished issuers on sustainability factors, which in turn made it harder for them to push for the case of ESG disclosure. Another factor commonly identified by some exchanges was that while there was clearly a need for ESG disclosure that was relevant in local contexts, investors had not consistently specified what disclosure was expected of companies and how they integrated it into their investment decisions, leaving the exchanges to feel their way through this new topic generally unaided by existing market expertise.

Sustainability presents a business case – but is not a significant revenue driver, yet

The exchanges' overall increased reliance on trading volumes as a primary source of revenue may appear to work against the aims of long-term investor-led initiatives focused on sustainable capital markets. Yet, stock exchanges contend that the facilitation of high frequency and derivative trading activities is not mutually exclusive to meeting the demands of long-term investors. This is developed in the next section. Our survey results show that 57 percent of respondents agreed that strong sustainability requirements for listed companies made good business sense for the exchange; only 14 percent disagreed. This points to an increased awareness

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i. With the exception of the Taiwan Stock Exchange.

ii. This guidance could vary from the issuance of a circular or a detailed voluntary guideline to a guideline supported by a comply or explain regime.

and progression in the views of exchanges on the business case (only 37 percent of respondents agreed with this view in 2010). Exchanges pointed out that sustainability initiatives and products do not contribute significantly to their revenue and that the immediate business case was in enhancing issuer credibility. Emerging market exchanges were more likely to view ESG credentials as a competitive differentiator and reputation-enhancing factor, though some developed market exchanges also view them as a helpful reputational tool. The survey findings did not suggest a consistent link between ownership of stock exchanges - whether government or private - and their attitudes toward sustainability initiatives.

A will to act does not necessarily translate to an ability to act

The conversion to for-profit entities has seen stock exchanges relinquish some of their previous self-regulatory duties to national or industry regulators. Only 10 percent of survey respondents considered that the implementation of mechanisms to promote sustainability disclosure and accountability, including those that pertained to listing rules, was solely within their remit. Instead, more than half of the respondents indicated that this remit was jointly shared with regulators and legislators (company law). In about a third of markets this was deemed entirely the jurisdiction of regulators and legislators. A lack of regulatory support was highlighted by over half of the survey respondents that identified factors that discouraged them from undertaking sustainability initiatives.

Regulatory initiatives are necessary to build mainstream sustainable capital markets

Today's capital markets have been shaped by both market forces and regulatory initiatives. Likewise, the development of the sustainable capital markets of the future will require a nudge from policymakers given that the factors that need to be integrated are often external to existing market knowledge and experience. Due to the current nature of market ecosystems and the complexity of accountability, we also believe that to be truly effective, the overall dialogue requires some urgent, yet thoughtful political intervention. It would be highly facilitative if policymakers now supported the introduction of guiding principles and a roadmap to enhance ESG disclosure by companies in their markets. They could also formalise mechanisms to hold companies accountable for those disclosures. While ESG disclosure requirements must be characterised by local contexts, a minimum level of comparability across markets is needed. The absence of a global minimum standard could undermine the ESG disclosure-related initiatives that are springing up, silo-like, in each market. Tellingly, more than three quarters of stock exchange respondents to the survey welcomed a global approach to consistent and material corporate sustainability reporting. Further, a similar proportion of respondents favoured a 'convention on corporate sustainability reporting' where governments are asked to consider mandating that boards of companies: (a) consider sustainability issues in strategy discussions; and, (b) on a comply or explain basis, integrate those sustainability issues that they consider to be material into their Annual Reporting.

To further promote sustainable capital markets, we suggest the following next steps.

For Investors:

1. Investors should complement their dialogue with exchanges with a more robust dialogue with respective market regulators and policy makers. Long-term investors whose portfolios' performances are damaged by market short-termism should better communicate their views to public authorities;

2. Conversations with some exchanges reveal that investor response has been muted to sustainability guidelines released and the associated consultations sought by them. Investors need to voice their views more clearly and assertively at such opportunities;

3. Investors should be prepared to define clearly the ESG factors considered in their investment decisions and how they use issuer data to influence them;

4. Investors need to more demonstrably reward/punish issuers on ESG factors through their investment decisions.

For exchanges and regulators:

1. Stock exchanges should follow the lead of peers such as the Johannesburg Stock Exchange (JSE), BM&FBOVESPA and Istanbul Stock Exchange and become signatories of the PRI. PRI could consider forming a STOCK EXCHANGES WORKING GROUP. The PRI could also consider creating a new platform where market regulators and policy makers could collaborate with exchanges and investors in a multilateral 'Roundtable on Exchanges and Sustainable Capital Markets';

2. Dialogue with listed companies on ESG disclosures should be enhanced. They should aim to eventually become part of routine engagement forums that highlight risks and opportunities and drive adoption of recognised reporting and management systems and international standards and certifications;

3. Stock exchanges and market regulators are encouraged to prepare for active participation at the Sustainable Stock Exchanges 2012 Global Dialogue in Rio de Janeiro on 18 June 2012. The event will provide a platform for sharing of best practices and deliberation on the future of sustainable capital markets;

4. Regulators should work with policymakers in developing an international policy framework requiring, on a comply or explain basis, listed companies to provide material and consistent ESG disclosures.

For policymakers:

1. Set a roadmap for the development of an international policy framework that supports improved and consistent ESG disclosure by listed companies across markets;

2. Support the introduction of sustainability initiatives related to listed companies by market regulators and securities exchanges in respective markets.

II. THE ROLE AND BUSINESS OF EXCHANGES

Stock exchanges play a vital role in economic development as one of the primary tools for the allocation of capital in both emerging economies and developed ones. Exchanges, primarily demutualised companies and implementers of national economic policy and company law, have been compared to "newspapers, national airlines, large broadcasters, major automobile companies, oil companies, and major high street and investment banks" in terms of their "sustained institutional prominence in the lives of nations".[5] The indices created using the platforms provided by the global exchanges are used by the financial services industry and politicians alike as a barometer of economic health and a predictor of financial well-being.

Today, however, as with many of the companies of 'national significance', exchanges are, in some senses, structurally compromised and insufficiently incentivised to perform the public service function that the public imagines them to have at the core of their business. The poor public and media perception of the exchanges' role in the recent economic turmoil and resultant market volatility underscores the fact that the distinction between the impact of successful capital markets regulation and a stock exchange's ability to control and smooth corporate earnings has not been widely understood. As Peter Clifford, Deputy Secretary General of the World Federation of Exchanges (WFE), wrote in the introduction to that organisation's January 2012 letter: "In 2011, [clients, regulators and the general public] came to exchanges with their questions – sometimes literally. Beyond their well-known brands, and beyond being symbols for business and wealth creation, why would an exchange be the focus of this attention? Was this a misguided or outdated concept about markets?"[6]

It is also not generally recognised that around half of all exchanges are now companies listed on their own exchanges, introducing a unique complexity to the conundrum that is the modern stock exchange.

The structure of exchanges

Historically, even up to twenty years ago, most exchanges tended to be clubby, self-regulated mutual bodies serving their broker members. At that time, revenues were mostly driven by annual membership dues and success for exchange members was based on them generating trading activity, relying on the orderly conduct and smooth operations of the exchange.

The first wave of demutualisations began with the Stockholm Stock Exchange in 1993 and included the Bombay Stock Exchange in 1995 and Bursa Italia in 1997. Demutualisation was followed by a second stage in which exchanges became publicly traded and profit-seeking companies listed on their own exchange, with the Australian Securities Exchange being the first to follow this model in 1998. Such restructurings are still taking place: in 2010, the Warsaw Stock Exchange became the latest to list as a public for-profit entity. In this new model, non-brokers could be owners and the brokers were no longer obliged to be owners. Revenues of the new exchanges were now driven primarily by fees for a range of activities (including trading, listing, clearing, settlement, depository, custody and nominee services as well as the more recent revenue streams of market data, analytics or information fees). Success for the exchanges is based on shareholder returns, driven by fees from multiple IPOs and higher frequency trading 'velocity'.

The WFE now groups its members into five categories: listed companies, mutual associations, private companies, demutualised, and 'other' (including government, or quasi-government owned). The 27 exchange entities included in the scope of this report are all WFE members and span these five categories. Sixteen are profit-seeking listed companies. As of November 2011, almost half of WFE members were listed entities.

Chart 1: Listed for-profit exchanges dominate the industry

WFE members according to legal status in 2010; based on a total of 51 members

Source: World Federation of Exchanges Cost & Revenue Survey 2010 – November 2011

The exchange model has changed dramatically over the past few years. Latterly, exchanges have become increasingly heavily regulated. They have also become highly competitive as companies exercise more flexibility in seeking to raise capital outside their national boundaries. Finally, they are now hugely capital intensive (mostly due to the IT infrastructure required for increasingly high frequency trading), and more and more are seeking to grow through acquisitions in order to enjoy greater economies of scale.

Following a frenzy of mergers and acquisitions from 2006 onwards, the size and dominance of the large global exchange groupings are increasingly causing concern for market observers. The latest round of M&A attempts have been thwarted, mostly over concerns that these larger, multinational 'exchange holding companies' with global reach, which are regulated by a variety of different institutions, are reducing competition and the power of national policy makers to control markets.

Examples include SGX's attempt to take over ASX Ltd in 2010, reportedly blocked by the Australian government in the name of national interest, and Deutsche Börse's move to acquire NYSE Euronext, which was blocked by European competition regulators because they believed the combined exchange, which would have been the world's largest exchange, would wield too much financial power in the trading world. Also stymied last year was the proposed (hostile) takeover of NYSE Euronext by Nasdaq OMX and the Intercontinental Exchange, and the merger of LSE Group and TMX Group. This increase in interest from the world's dominant financial regulators shows that, despite the cutthroat reality of the international exchange business, exchanges are still primarily viewed as national symbols, reflecting the health, vibrancy and investment credibility of the macro economy of their jurisdiction.

Generalisations on this wide group of exchange companies (we covered 27 exchanges and exchange groups in this research) are problematic; they vary greatly in terms of size, trading volume, percentage ownership by government agencies, as well as in terms of how they are governed and regulated. Therefore any discussion about the 'market role' of a stock exchange needs to take into account that the business structure, revenue drivers, costs and competitive environment of exchanges vary greatly. This has direct implications for the Sustainable Stock Exchanges initiative. Since no two exchanges or exchange groups are the same, the means to achieving the ends may differ in the detail but be consistent and comparable in the objectives and timelines for achieving them. Governments, policy makers and investors alike, however, should be aiming for overall guiding principles and agreement on goals as well as possible timeframes.

Regulatory framework

The regulatory oversight of stock exchanges in many jurisdictions has been tightened in recent years to adjust to the model of stock exchanges that are (listed) for-profit entities.

In some countries (and many European countries in particular) several of the regulatory functions traditionally performed by stock exchanges have been completely removed from their mandate and given to regulatory bodies. The structures of these regulatory entities are also varied; some are government-backed agencies such as the Monetary Authority of Singapore, the Hong Kong Securities and Futures Commission and the Mexican Comisión Nacional Bancaria y de Valores, and some are private companies such as Tokyo Stock Exchange Regulation.

The result is that the self-regulatory powers of each exchange now differ greatly, as – by the same token – does the extent of regulatory oversight exchanges are subject to. For example, in the UK, the London Stock Exchange no longer sets listing rules or approves new listings: this function is performed by the Financial Services Authority. At the other extreme, the Australian Securities Exchange is a largely self-regulatory organisation (SRO), although it shares some functions, such as member and intermediary regulation, with the Australian Securities and Investments Commission.

A January 2011 World Bank paper outlined four regulatory models under which exchanges could be broadly classified on a spectrum of regulatory oversight from a 'Government Model', with centralised governmental regulation (e.g. the UK model), to an 'Independent Self-Regulating Organisation Model'. The Australian Securities Exchange is classified as a 'strong SRO model'. The Hong Kong Stock Exchange (HKEx) meanwhile is a 'limited SRO model', since the Hong Kong Securities and Futures Commission is the principal regulator but HKEx does nonetheless have some "front-line" SRO duties, including control of listings functions.[7]

Typical areas of oversight of an exchange by a regulator include: independent surveillance of the market (to ensure insider trading and market manipulation does not take place), the pursuit of civil prosecution of both listed companies that fail to make timely disclosure of material information and any participants suspected of market misconduct, approval of substantial shareholdings in the exchange, supervision of brokers, and regulation of the exchange as a self-listed entity. Most importantly for this report, many regulators hold the ultimate responsibility for approving any changes to listing rules that the exchange is tasked to define and enforce. Therefore strengthening ESG disclosure requirements on listed companies requires investors and stock exchanges to communicate their needs to regulators.

An assumption is often made that there is an inherent conflict of interest between a stock exchange's mandate to act in the best interests of its shareholders and as an overseer of the same market it is listed on itself. Observers should recognise, however, that the shareholders of modern exchanges are often the same institutional asset owners and managers who rely on the smooth running of these exchanges to conduct their main business of buying and selling assets. Their interests are therefore perfectly aligned with government regulators in their aim for fair, transparent and efficiently-regulated markets. What is surprising at this stage is that there has been less collaboration between the investors and regulators to this end.

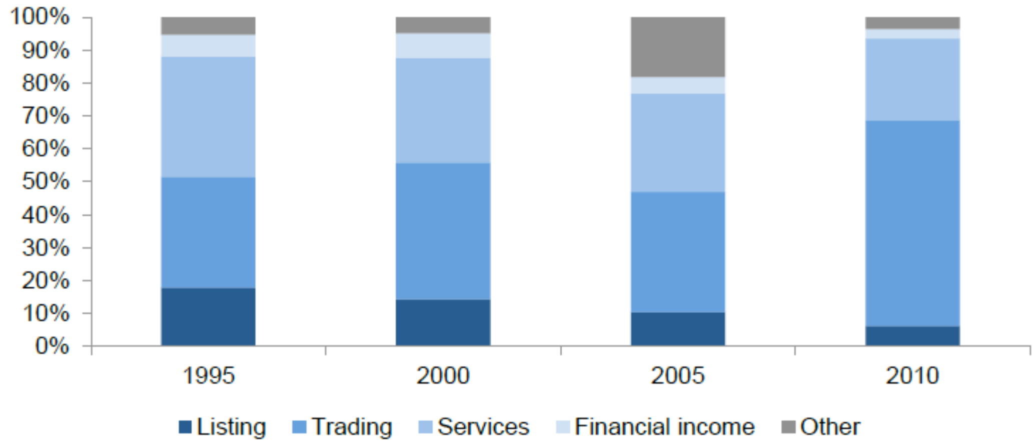
The regulatory model of an exchange is highly significant, since it has direct implications for an exchange's ability to implement its own sustainability-related initiatives and react to investor demands. This is especially true where investors are pushing for changes to disclosure requirements and listing guidelines. In many jurisdictions, it may in fact be the securities regulator to whom such addresses should be made, since they ultimately control this function.

Revenue drivers and earnings

As many stock exchanges have evolved into for-profit entities, the principal source of their revenues has also seen a shift, according to composite figures from the WFE's membership. Most notably, the proportion of revenues earned from trading at the group as a whole has shown a prolific increase, especially since 2005, accounting for a total of 63 percent in 2010.[8] In contrast, income derived from listing activities appears to be declining as a proportion of revenues. In 2010, only 6 percent of the average revenues earned by members of the World Federation of Exchanges derived from listings, including new listings and ongoing listing fees.

Reliance on trading volumes increasing

Chart 2: Historical Revenues of WFE members



Source: World Federation of Exchanges Cost & Revenue Survey 2010 – November 2011

The exchanges' increased reliance on trading volumes as their primary source of revenue may appear to work against the aims of long-term investor-led initiatives focused on sustainable capital markets. Exchanges are increasingly reliant on a key customer base of shorter-term traders, including High Frequency Traders (HFT) and other algorithmic investors, who are not generally interested in the qualities of the underlying stock or asset, but instead seek to arbitrage gaps in pricing. The increasing importance of derivatives trading and the clearing of those trades as a revenue driver (together making up an imposing 27 percent of revenues of WFE members in 2010)[9] supports this line of thinking and highlights the decreasing importance of long-term investment strategies to the core business of the exchange.

This argument has its failings. HFT are at the extreme end of the spectrum, but they and other short-term investors depend on other investor groups, such as passive investors, to create the inefficiencies and pricing discrepancies that they exploit. Many believe that the dominance of short-term activity ensures necessary liquidity for other investors.

One area of concern is the declining contribution of listing activities to overall revenue generation at the exchanges. Many of the aims of investors specifically target this area of an exchange's business, for example requesting exchanges to mandate greater corporate disclosure at listing and on an annual basis. As listing revenues have become less financially significant to the average exchange, there is less of a direct financial incentive for the organisation to devote time and capital to this area of its business. On the other hand, since listing fees are not a huge revenue driver, it could be argued there is less financial risk for exchanges in pushing for more stringent ESG disclosure in their listing requirements.

Competitive landscape

The competitive landscape for exchanges varies, depending on their geography and business model, but can almost universally be described as becoming more crowded and aggressive. It primarily comprises other regulated stock exchanges alongside alternative exchanges and trading venues.

Other regulated exchanges

Regulated exchanges compete with each other in the first instance to attract new listings, and then to attract investment and trading activity. Though most companies do list on their 'home' exchange, more and more companies are listing on multiple exchanges in jurisdictions around the world.

In general, developed world exchanges compete with other developed world exchanges, and emerging market exchanges with other emerging market exchanges. However, there is a healthy pipeline of emerging market companies looking for primary and secondary listings on the world's leading exchanges, in particular on NYSE. There is also a marked intra-regional rivalry among the Latin American, Asian and Emerging European exchanges.

Alternative exchanges and trading venues

At the same time as regulation was tightened for many for-profit exchanges to prevent potential conflicts of interest, overall market regulation in developed economies generally eased, allowing for the emergence of a competitor base, especially on specific trading functions. This happened first in the US under rules implemented by the Securities and Exchange Commission, and was mirrored in Europe in 2007 under the Markets in Financial Instruments Directive (MiFID) as governments and regulators sought to erase the "virtual monopoly" held previously by regulated exchanges. What emerged, very quickly, was a rash of cheaper alternative trading systems (ATSs), including electronic communication networks (ECNs) (or the European equivalent, multilateral trading facilities (MTFs)) amongst others. Many ATSs operate as so-called 'dark pools', offering investors invisibility on their trades. This is desirable for investors wishing to shift large blocks of shares without alerting the market to their movements and exposing themselves to a potential shift in price.

One of the most successful alternative trading venues has been Chi-X Europe, an alternative exchange venue developed in 2007 by a consortium of banks including Nomura Group, Bank of America Merrill Lynch, Goldman Sachs and Morgan Stanley. By offering a low-cost alternative venue to trade shares listed on LSE, Deutsche Börse, Euronext and OMX, Chi-X quickly took market share and today is reportedly the largest share-trading venue in Europe, with around 40 percent of trading in FTSE 100 stocks alone.[10] In November 2011, Chi-X Europe was acquired by its US equivalent and rival BATS Global Markets. The Chi-X brand has continued to roll out globally, most recently launching in Australia at the end of 2011.

These non-exchange platforms do not compete on new listings or IPOs, they simply offer investors cheaper access to trade companies already listed on main regulated stock exchanges. Regulators have effectively now created a free-rider situation in the market in which non-exchanges are benefiting from, but not bearing the costs of, the listing and regulatory services of regulated exchanges. WFE's Focus magazine (2011) argued that increased competition was a key factor ushering in a "new value reality" for stock exchanges, wherein listing and regulatory services were "being un-valued".

Traditional exchanges' regulatory and listings services are of great value to capital market participants and the economy as a whole. Yet these services are not appropriately valued as a public good by market users or regulators. The result is that exchanges continue to struggle to monetise this value.[11]

This is significant since regulatory and listings services are the functions in which many stock exchange sustainability initiatives take place. However, since most exchanges are for-profit entities, there generally needs to be a way for them to – as the WFE article said – "monetise the value" before they can be expected to act in this area (presuming that it is within the remit of the exchange to make changes).

The business case for sustainability

There are examples of exchanges clearly "monetising the value" of action on sustainability. Brazil's BM&FBOVESPA and South Africa's Johannesburg Stock Exchange are both renowned globally for their forward-thinking moves on sustainability, and in both cases there has been a clear business case for the action taken. As is the case in many emerging markets, environmental, social and especially corporate governance standards were perceived as lagging international standards, lowering the market's attractiveness to investors. At both exchanges, the aim was to brush off the 'taint' of emerging markets and bring the exchange's market to a more prominent place on a global stage. In South Africa, leaps forward in sustainability performance by the Johannesburg SE and its companies were supported by a country-level push for positive change, led and guided by the three successive government-mandated King reports on corporate governance. In Brazil, BM&FBOVESPA put in place mechanisms to raise the standard of corporate governance in its listed companies above the threshold required by national law. Actions included the much-lauded Novo Mercado, an elite listing board accessible only to companies meeting a set of best practice guidelines on corporate governance. This approach of 'regulatory dualism', whilst involving much time and resources from the exchange management team, could be a solution for other emerging markets struggling to compete.

Several other exchanges have seen enough 'non-monetary value' in sustainability initiatives to proceed without a clear profit motive. Ms Yeo Lian Sim, Chief Regulatory Officer of Singapore Exchange, shared in an interview for this report that SGX was motivated to develop the Guide to Sustainability Reporting because disclosure on sustainability was clearly consistent with its disclosure-based regime and relevant to the investing public. There was no direct financial incentive for the Exchange's initiative and action.

As a platform for sustainability initiatives that can reach the maximum number of companies in one move, exchanges have great potential. However, for-profit exchanges need to have an added incentive for them to act on this issue. As in the case of markets failures generally, where there is no direct monetary case, the push may need to be regulatory.

III. PROGRESS REPORT

Summary of Leading 27 Exchange Entities

Exchange entity	Conducts business in	Number of listed companies (Jan 2012, WFE)	Market capitalisation Nov '11 (USD, Nov 2011, WFE)	Type of company	Date of demutualisation	Listed on its own exchange	Regulatory bodies
Australian Securities Exchange	Australia	2078	1303.81 +	Listed company for profit	1998	Y	Australian Securities and Investments Commission
BM&FBOVESPA	Brazil	372	1393.77	Listed company for profit	2008	Y	Comissão de Valores Mobiliários
BME Spanish Exchanges	Spain	3263	1096.2	Listed company for profit	2001	Y (Bolsa de Madrid)	Comisión Nacional del Mercado de Valores
Bolsa de Santiago	Chile	266	290.37	Listed company for profit	-	Y	The Superintendencia de Valores y Seguros
Bolsa Mexicana de Valores	Mexico	476	441.41	Listed company for profit	2008	Y	Comision Nacional Bancaria y de Valores
Bombay Stock Exchange	India	5115	1225.47	Demutualised for profit	2007	N	Securities and Exchange Board of India (SEBI)
Bursa Malaysia	Malaysia	937	431.09	Listed company for profit	2004	Y	Securities Commission; Labuan Offshore Financial Services Authority
Deutsche Börse AG	Germany	742	1303.59	Listed company for profit	2000	Y	European Securities and Markets Authority; Federal Financial Supervisory Authority; State Exchange Supervisory Authority; Trading Surveillance Office
Hong Kong Exchanges and Clearing	Hong Kong	1506	2480.18	Listed company for profit	2000	Y	Securities and Futures Commission
Indonesia Stock Exchange	Indonesia	442	407.71	Private company for profit	-	N	Indonesian Capital Market and Financial Institutions Supervisory Agency
Istanbul Stock Exchange	Turkey	264	232.69	Governmental not for profit	NA	N	Capital Markets Board of Turkey
Johannesburg Stock Exchange	South Africa	392	852.28	Listed company for profit	2005	Y	Self-regulatory; supervised by Financial Services Board
Korea Exchange	Korea	1816	1091.5 +	Demutualised for profit	-	N	Financial Services Commission; Financial Supervisory Service
London Stock Exchange Group	United Kingdom, Italy	2864	3397.13 +	Listed company for profit	London 2000; Italy 1997	Y (LSE)	Financial Services Authority, Commissione Nazionale per le Società e la Borsa
Moscow Interbank Currency Exchange	Russia	284	770.61	Governmental not for profit	-	N	Federal Financial Markets Service of Russia

Who should implement sustainability mechanisms? (in the view of the exchange) #	Does the exchange make its own ESG disclosures?	Is the exchange a signatory of PRI?	Has the exchange launched sustainability related indices?	Has the exchange offered Sustainability guidance for listing companies?	Has the exchange supported the trading or development of carbon markets?	Ownership of the exchange entity (according to infromation accessible in the public domain - ownership in excess of 4%)
Company law or Regulator	N	N	N	N	Y	Perpetual Ltd 7.31%, National Australia Bank LT 4.99%, Commonwealth Bank of Australia 4.93%
Both	GRI	Y	Y	Y	Y	Blackrock Inc 5.30%, Oppenheimerfunds Incoporated 5.20%, Lone Pine Capital Llc 5.08%, Vanguard Group Inc 4.72%
-	Y	N	Y	-	-	Banco de Espana 5.34%, Banco Bilbao Vizcaya Argentaria 5.09%, Caixabank 5.01%
Company law or Regulator	N	N	N	N	N	-
*	N	N	Y	*	N	Largest identified: Capital Research Global Investor 2.40%,
*	N	N	Y	*	N	-
Exchange	Y	N	N; Planning	Y	N	Capital Market Dvlp Fund 18.77%, Minister of Finance Inc 16.22%
Company law or Regulator	GRI	N	Y	Y	Y	Deutsche Boerse Ag 5.09%, Blackrock Investment Management 5.01%
Both	GRI	N	N	Y	N	Hong Kong SAR 5.83%, JP Morgan Chase & Co 4.89%
-	N	N	Y	-	-	Government Emp Pension Fd 13.36%, Skagen Funds 7.44%, Fidelity Management & Research 6.05%, Capital Research Global Investor 5.46%, Liberty Life Assoc Africa 5.10%, Thembeka Market Hldgs 4.06%
Both	Y	Y	N; Planning	N	-	NA - Governmental
Both	Y	Y	Y	Y	N	-
Both	Y	N	Y	Y	N	-
Company law or Regulator	Y	N	Y	N	N	Borse Dubai Ltd 20.64%, Qatar Investment Authority 15.01%, Unicredit Spa 6.00%, Intesa Sanpaolo Spa 5.63%, Fidelity Investments Ltd 5.54%, Legal & General Group 4.99%
-	N	N	N	-	-	WFE (2009 data) Central Bank of Russian Federation 29.79%, UniCredit Bank 12.74%, Bank of Development and Foreign Trade 11.81%, VTB Bank 7.62%, Commercial Savings Bank of the Russian Federation (Sberbank) 7.54%, Rosbank 4.95%, CentroCredit 4.28%

Exchange entity	Conducts business in	Number of listed companies (Jan 2012, WFE)	Market capitalisation Nov '11 (USD, Nov 2011, WFE)	Type of company	Date of demutualisation	Listed on its own exchange	Regulatory bodies
NYSE Euronext	United States, France, Portugal, Belgium, Netherlands, UK	3418	15187.61	Listed company for profit	NYSE March 2006; Euronext 2000	Y	Securities and Exchange Commission Paris - Autorité Des Marchés Financiers Lisbon - Comissão do Mercado de Valores Mobiliários Brussels - Banking and Finance Commission and Euronext Brussels Market Authority Amsterdam - Securities Board of the Netherlands, The Netherlands Authority for the Financial Markets UK - Financial Services Authority
Nasdaq OMX	United States, Denmark, Finland, Sweden and Iceland	3440	5057.58	Listed company for profit	Nasdaq 2001, OMX Group 1993	Y (Nasdaq)	Securities & Exchange Commission Iceland - Fjármálaeftirlitið (FME) or Financial Supervisory Authority Finland - Financial Supervision Authority (FSA) Sweden - Finansinspektionen (FSA) Denmark - Finanstilsynet (FSA)
National Stock Exchange of India	India	1641	1200.74	Demutualised for profit	2007	N	Securities and Exchange Board of India (SEBI)
Philippine Stock Exchange	Philippines	253	175.89	Listed company for profit	2001	Y	Securities and Exchange Commission
Saudi Stock Exchange - Tadawul	Saudi Arabia	150	347.49	Governmental not for profit	-	N	Capital Market Authority
Shanghai Stock Exchange	China	932	2457.33	Association not for profit	-	N	China Securities Regulatory Commission
Shenzhen Stock Exchange	China	1420	1044.6	Association not for profit	-	N	China Securities Regulatory Commission
Singapore Exchange	Singapore	772	665.73	Listed company for profit	1999	Y	Monetary Authority of Singapore
SIX Swiss Exchange	Switzerland	280	1122.74	Private company for profit	2002	N	Swiss Financial Market Supervisory Authority
The Stock Exchange of Thailand	Thailand	545	289.75	Governmental not for profit	N. The SET reportedly plans moves towards full liberalisation and negotiable commissions next year.	N	Securities and Exchange Commission
Tokyo Stock Exchange	Japan	2288	3468.88	Demutualised for profit	2001	N	Financial Services Agency; Securities and Exchange Surveillance Commission
Toronto Stock Exchange	Canada	3947	2014.47	Listed company for profit	2000	Y	Ontario Securities Commission

Who should implement sustainability mechanisms? (in the view of the exchange) #	Does the exchange make its own ESG disclosures?	Is the exchange a signatory of PRI?	Has the exchange launched sustainability related indices?	Has the exchange offered Sustainability guidance for listing companies?	Has the exchange supported the trading or development of carbon markets?	Ownership of the exchange entity (according to infromation accessible in the public domain - ownership in excess of 4%)
-	GRI	N	Y	-	-	T Rowe Price Associates 7.35%, Vanguard Group Inc 5.20%
-	N	N	Y	-	-	Borse Dubai Ltd 16.81%, Investor Ab 10.70%, Wellington Management Co Llp 4.41%, Vanguard Group Inc 4.30%
Both	N	N	Y	N	N	-
Both	N	N	N; Planning	N	N	San Miguel Corp Retirement 10.32%, The First Resources Mgmt 10.10%
-	N	N	N	-	-	NA - Governmental
Both	Y	N	Y	Y	N	-
*	Y	N	*	*	N	-
Exchange	Y	N	N; Planning	Y	N	Sel Holdings Pte Ltd 23.33%, Tokyo Stock Exchange Inc 4.99%
-	Y	N	N; Considering	N	N	-
Company law or Regulator	Y	N	N; Planning	Y	N	NA - Governmental
Both	N	N	Y	N	N; Planning	Morgan Stanley Mufg Securities 4.35%
Both	N	N	Y	Y	Y	CI Investments Inc 4.14%

LEGEND	
Lack of publicly disclosed information or No response	-
Off record response	*
Market cap figure for January, 2012, WFE	+
Refers to Question 8 of the Survey	#

This study was completed using a combination of publicly available information, survey responses and our own findings at the time of research, February 2012. While comprehensive coverage is intended, the table may not reflect all structures and sustainability initiatives that exchanges have been internally pursuing or contemplating. Exchange entity ownership information was accessed from Bloomberg, January 2012.

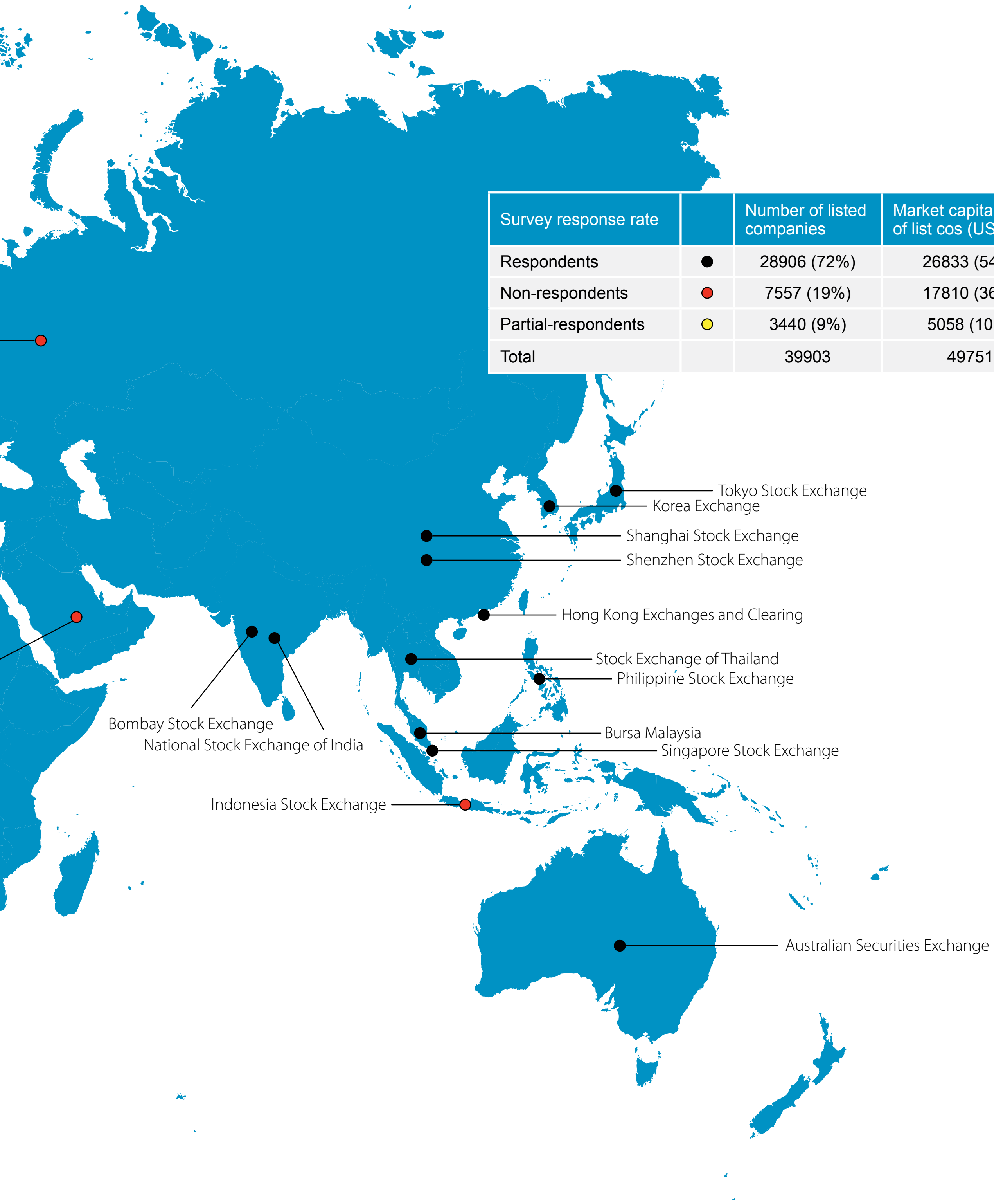
Note: Nasdaq OMX, NYSE Euronext, London Stock Exchanges Group operate in multiple markets and the map does not intend to locate all/precise exchange locations

Survey methodology and coverage

27 exchange entities were surveyed. An exchange entity could refer to either the holding company of a single or multiple exchanges or a single exchange. The survey coverage is almost fully consistent with that of the 2010 report although NASDAQ OMX Group, NYSE Euronext and the London Stock Exchange Group are considered to be single exchange entities for the purpose of this survey, as this is how they chose to respond to the survey (NYSE Euronext did not respond). The survey letters were responded to by different functions across exchanges - ranging from the Company Secretary (ASX), Listings Division executives (NSE, BSE and HK Ex) to specific SRI and Sustainability Index (JSE) or Corporate Responsibility/Sustainability functions (Deutsche Börse, BM&FBOVESPA). Respondents were given the option to reply to questions 'off the record' if preferred.

The survey response rate in 2012 was up to 21 out of 27 (or 78 percent) of the exchange entities contacted, from 16 out of 30 (or 53 percent) of exchange entities contacted in 2010. While NASDAQ OMX Group did not respond to the survey questionnaire and is not counted among the 21 respondents, it provided a detailed letter response that addressed many areas covered by the questionnaire.

Survey response rate		Number of listed companies	Market capitalisation of list cos (US$ bn)
Respondents	●	28906 (72%)	26833 (54%)
Non-respondents	●	7557 (19%)	17810 (36%)
Partial-respondents	○	3440 (9%)	5058 (10%)
Total		39903	49751



Definitions and notes

The terms Sustainability and ESG were used interchangeably for the purpose of the survey and the report. 'ESG' and 'Sustainability' have developed their own distinct interpretations and connotations in the Responsible Investment industry. However, given the differences in the uses of these terms and the greater prevalence of one over another in certain markets among companies and exchanges, this inter-changeability was unavoidable. To avoid confusion, surveyed exchange entities were informed that Sustainability/ESG implied more than pure corporate governance aspects alone.

Respondents were not required to provide evidence for any of their responses. In some cases, if a response was anomalous, the respondent was contacted for clarification.

The number of respondents referred to in the report refer to the number of respondents to a particular question. This may be lower than or equal to the total number of respondents to the survey because a few exchange entities chose not to respond to certain questions in the survey.

A. IMPROVING ESG DISCLOSURE

In certain markets, exchanges have taken the first steps to prompt their companies towards ESG disclosure and have issued guidance documents or circulars. The issuance of guidance documents that support voluntary disclosure is typically accompanied by market consultations, as observed at HKEx and SGX. Such guidance can be focused on particular issues or sectors that are more exposed to E&S risks in a particular market, or on encouraging broad-based ESG disclosure as a best practice.

In the early stages these are set out as voluntary guidelines, which may evolve into some form of "comply or explain" or mandatory regime. For example, SGX's Sustainability Reporting Guide (released in 2011) stated that, "Sustainability reporting is not a mandatory requirement for listed companies under the Listing Manual. As in many other countries, it is also a voluntary exercise in Singapore... Conceivably, there will be progress towards mandatory reporting through regulations and rules in the future.""[12] HKEx is another exchange that has launched a Consultation paper that calls for voluntary disclosure on ESG issues, but as explained in an interview by Michael Cheng, from the Listing Policy, Secretariat Services & Support Department of HKEx, this could evolve into a "comply or explain" regime in future if the market participants were ready. Nasdaq OMX considers that in Europe, the evolution of sustainability reporting guidelines will likely mimic that of Corporate Governance Codes in those markets.

In November 2011 the Securities and Exchange Bureau of India (SEBI) directed the 100 largest listed companies to make disclosures as per the Ministry of Corporate Affairs' (MCA) National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business.[13,14] These guidelines were finalised after extensive stakeholder consultations and are comprised of nine principles applicable on an "apply or explain" basis. It is noteworthy that the stock exchanges are not the primary drivers of these initiatives within the market as such requirements do not typically fall within their remit.

The likes of the JSE, BM&FBOVESPA and Bursa Malaysia are at the more advanced end of the spectrum and have had long-running active ESG disclosure-related programmes. The JSE was the world's first stock exchange to require integrated reporting from its listed companies on an "apply or explain" basis in 2010. After extensive market consultations held by that exchange, in a December 2011 announcement, BM&FBOVESPA adopted a report or explain model for sustainability or similar reports published by listed companies. If listed companies did not publish a regular sustainability report, they have been recommended to explain why they do not. Since 2007, Bursa Malaysia has required listed companies to disclose their CSR activities and if there are none, provide a statement to that effect.

Interviews with executives from BM&FBOVESPA, the JSE and observations from public comments made by the Chief Regulatory Officer (CRO) of Bursa Malaysia at the Sustainable Stock Exchanges 2010 Global Dialogue in Xiamen, China reveal that the speed at which these reporting requirements harden will depend on the market response. They also reveal that the exchanges favour a combination of a voluntary and report or explain regime for the moment.[15] For a scenario that would involve a greater degree of mandatory disclosure, Corli le Roux, Head of SRI Index and Sustainability at Johannesburg Stock Exchange, believes that the exchange or listing authority would have to be certain there was "clarity within the exchange that the issues on which disclosure is to be mandated are critical to improve the transparency needed by investors to inform valuations and stimulate further engagement."

MOST RESPONDENTS PROVIDE ISSUERS WITH GUIDANCE ON SUSTAINABILITY

Q1 Has the exchange provided any guidance for issuers on global sustainability reporting initiatives or materiality of sustainability issues to encourage improved ESG disclosure, yet?

Units in this chart refer to the number of exchange entities. Source: Responsible Research, 2012

Commentary

More than half (12 out of 21) of the respondents in 2012 indicated that their exchange/s had already provided guidance to issuers on global sustainability reporting initiatives or materiality of sustainability issues to encourage improved ESG disclosure. This is an increase on the 2010 survey, in which less than half (6 out of 16) of respondents indicated that their stock exchange/s had provided sustainability guidance to listed companies. (The 2010 question offered wider latitude, yet yielded a lower response).

MOST RESPONDENTS ENCOURAGE DISCLOSURE ON SUSTAINABILITY-RELATED ISSUES

Q2. Are issuers on your exchange encouraged/required to make sustainability/ESG related disclosure? (This includes but is not limited to sustainability reports, integrated reports, minimum reporting requirements from certain sectors, disclosures of carbon emissions. However, this does not include Corporate Governance reporting requirements that are devoid of any environmental/social content).

Units in this chart refer to the number of exchange entities. Source: Responsible Research, 2012

Commentary

More than two thirds (14 of 20) of the respondents to this question indicated that they had either encouraged or required issuers to make sustainability disclosures. The nature of such disclosures varied from the issuance of sustainability reports, integrated reports to sector specific minimum ESG reporting requirements.

NO RESPONDENT HAS SET TARGETS RELATED TO CLIMATE CHANGE DISCLOSURE BY ISSUERS

Q3. Has your exchange set targets for the number/percent of issuers who positively engage with climate change, by having reduction targets in place, or by disclosing detailed emissions data?

Units in this chart refer to the number of exchange entities. Source: Responsible Research, 2012

Commentary

This is a new question included in the 2012 survey. Target setting by listed companies relating to ESG performance is a part of best practice disclosure. Consequently for exchanges a KPI such as the one given in the question would relate to their most material sustainability impact – encouraging issue disclosure – rather than simply targeting factors such as in-house emissions (though they will also need these to provide an example to issuer companies). The example of climate change was used as it is the most mature ESG issue in terms of environmental disclosure.

No respondent seems to have established such targets. This stands to reason given that even the relatively more advanced markets are at the earliest stages of consultation or issuing guidance and next steps are being considered. Establishing such targets, however, would be a progressive step forward.

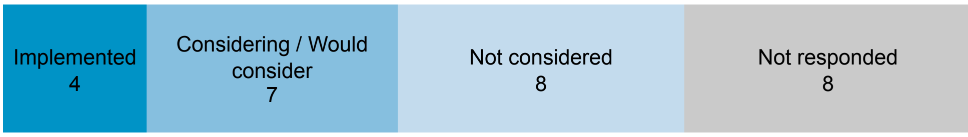
ESG disclosure at the IPO stage

The IPO is a critical stage of strategic thinking for growing companies; a time at which issuers are also required to make a wide range of financial and non-financial information available to the public for the first time. The SGX, for example, does not have specific sustainability requirements relating to initial listing, however, its Guide to Sustainability Reporting states that, "at initial listing, reporting on sustainability issues gives a better understanding of the company. Together with the disclosure on governance, financial performance, risks as well as future prospects, sustainability reporting provides investors with a holistic presentation of the company's performance."[16]

While this may well be the best time to get companies accustomed to making additional material ESG disclosures, there may also be concern from the exchanges about overwhelming executives with additional disclosure requirements at a time when they are already dealing with demands of intense due diligence and reporting. Some exchanges have privately aired concerns that strong disclosure requirements for new and/or existing listings would place them at a competitive disadvantage and, in some cases, companies have complained that investors rarely read the often-detailed ESG disclosure found in lengthy offer documents. However, a larger number of respondents to the SSE Survey have indicated that requiring such disclosure parameters – as long as the market demands them – does not necessarily have implications for the competitiveness of the exchange.

RESPONDENTS HAVE MIXED VIEWS ON MANDATORY SUSTAINABILITY DISCLOSURE AT IPO

Q4. Has your stock exchange implemented any other initiatives such as mandating issuers to make material sustainability related disclosure in IPO prospectuses?



Units in this chart refer to the number of exchange entities. Source: Responsible Research, 2012

Commentary

More than half (11 of 19) of the respondents indicated that they had either implemented such requirements or were considering/would consider them. Some respondents indicated that at the moment E&S disclosure requirements for IPO prospectuses may apply to certain sectors only. HKEx indicated that, "The Listing Rules require mineral companies to make certain material sustainability related disclosure in prospectuses."

B. COMPARABILITY AND CONSISTENCY

The majority of the world's largest exchange entities have taken or are considering some form of initiative aimed at encouraging sustainability disclosure. Such moves help to meet the demand of investors aiming to fully integrate ESG factors into investment considerations.

As financial reporting standards converge across world markets, driven by investors with global portfolios and multinational companies seeking a uniform system of accounting and reporting, there is a similar demand for comparability in ESG disclosure.

While the survey responses indicate that a large number of exchange entities are in favour of a global approach to consistent and material corporate sustainability reporting, others have expressed valid concerns. These primarily relate to differences in what may be material in different local contexts. For example, in South Africa, the key sustainability issues of domestic importance tend to be more focused on the social and labour issues, such as the Black Economic Empowerment project, whereas international institutional investors in general still pay relatively more attention to environmental matters. The GRI, the UNCTAD-ISAR, the IIRC and other institutions are making important efforts to mitigate such concerns through the provision of guidance that facilitates largely consistent disclosure, yet allows for contextual flexibility.

In developing their own reporting guidelines, exchanges need to build in parameters that allow for global comparability and avoid working in isolation. Exchanges and other market authorities should consider developing minimum common standards for disclosure across markets on issues that are universally important and promote the consistent development of guidelines, in addition to building in local nuances to cater to the market contexts in which their listed companies operate. The initial discussions that the PRI and Ceres have had with exchanges have centred on disclosure expectations on ESG issues in broader capital markets. The discussions have also considered the challenge of getting companies to disclose comparable data sets that are relevant and material throughout industry. Some investor groups have asked for company boards to use existing guidance (including GRI, UNGC, IIRC) and identify for themselves what is material. However, some exchanges have pointed out that the identification of specific metrics or KPIs by investors that can be commonly applied across listed companies would help stock exchanges provide clear and more actionable guidance to issuers.

A CLEAR MAJORITY OF RESPONDENTS WELCOME A GLOBAL APPROACH ON ESG DISCLOSURE

Q5. Would you welcome a global approach to consistent and material corporate sustainability reporting?

Units in this chart refer to the number of exchange entities. Source: Responsible Research, 2012

Commentary

Most respondents to this question indicated that they would welcome a global approach to consistent and material corporate sustainability reporting. The affirmative respondents to this question were from both emerging and developed markets.

This may point to the need for a common minimum guideline on disclosure. This view is also shared by a number of investor groups, particularly those that invest across markets. However, the benefit of comparability when designing global frameworks on sustainability reporting has to be weighed against the need for flexibility in the local context. In its response to this question, the JSE elaborated that, "one must be wary of standardising at the expense of materiality, which may in some cases need local consideration. The ongoing work of the Global Reporting Initiative (GRI) and the International Integrated Reporting Commission (IIRC) has and should continue to contribute to the promotion of consistent reporting on material ESG related issues at an international level, while allowing customisation for local circumstances that may be material to the company."

MOST RESPONDENTS WOULD WELCOME A GOVERNMENT CONVENTION ON SUSTAINABILITY REPORTING

Q6. Would you welcome a convention on corporate sustainability reporting where governments are asked to consider mandating the Boards of companies to do the following?

a. Consider sustainability issues in strategy discussions,
b. Integrate those sustainability issues that they consider to be material into their Annual Reporting and,
c. Explain why they do not comply if that is the case.

Units in this chart refer to the number of exchange entities. Source: Responsible Research, 2012

Commentary

Three quarters (12 of 16) of respondents to this question were in favour of a convention on corporate sustainability reporting where governments are asked to consider mandating the Boards of companies to (a) consider sustainability issues in strategy discussions, (b) integrate those sustainability issues that they consider to be material into their Annual Reporting and, (c) explain why they do not comply if that is the case. The affirmative responses were from developed and emerging markets and across continents.

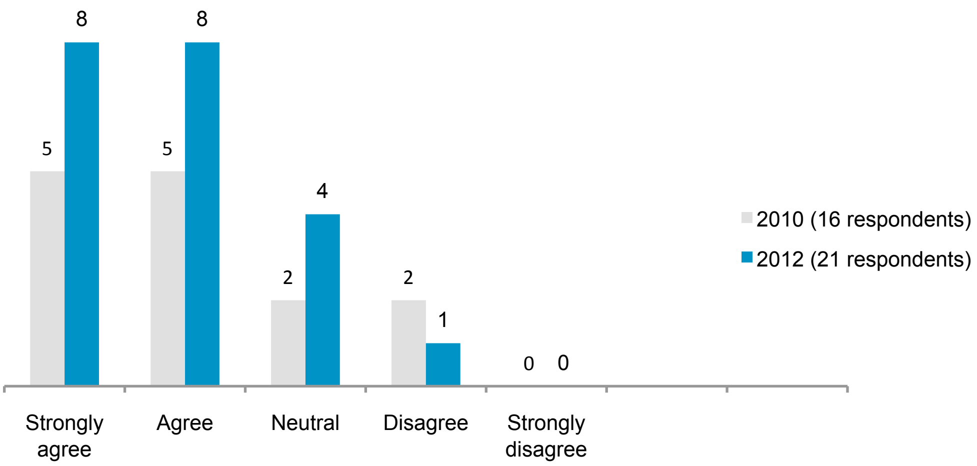
C. ACCOUNTABILITY AND RESPONSIBILITY

Stock exchanges play an influential role in market dynamics and have the ability to drive the sustainability agenda among listed companies. Exchanges have already established a patchwork of sustainability initiatives, however, exchange activities are typically subject to significant regulatory influence. Therefore, investors and stock exchanges will need to continue to engage in dialogue with regulators on the best ways to encourage sustainable capital markets.

STOCK EXCHANGES HAVE A RESPONSIBILITY TO ENCOURAGE CORPORATE SUSTAINABILITY

Q7. How much do you agree with the following statement?

Statement: "Stock exchanges have a responsibility to encourage greater corporate responsibility on sustainability issues"



Note: Two of the 16 respondents had not responded to this questions in 2010.

Units in this chart refer to the number of exchange entities. Source: Responsible Research, 2012

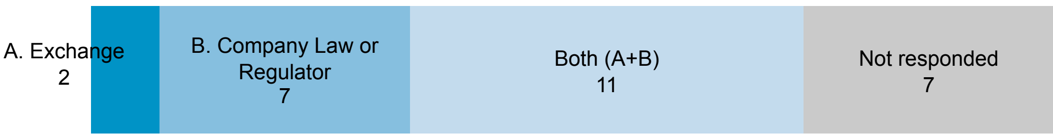
Commentary

The respondents to the 2012 survey overwhelmingly (16 of 21) support the view that stock exchanges have a responsibility to encourage greater corporate responsibility on sustainability issues. Only one of the 21 exchanges disagreed, while three were neutral. The positive response not only reaffirms, but also exceeds the response received to the same question in 2010.

MOST RESPONDENTS FEEL REGULATORY DUTIES SHOULD BE SHARED

Q8. Does your exchange believe that the following are within the duty/remit of the exchange itself or the regulator or company law?

- Issuance of guidance on sustainability reports;
- Implementation of listing requirements to mandate companies to report on E&S issues in board/ senior management incentives;
- Implementation of listing requirements to mandate companies to put the company's sustainability strategy or sustainability report to a non-binding AGM and, enacting a policy to encourage shareholders to report on the quality of sustainability reporting by a company.



Units in this chart refer to the number of exchange entities. Source: Responsible Research, 2012

Commentary

Only two of 20 respondents to this question considered that the implementation of mechanisms to promote sustainability disclosure and accountability was solely their duty/in their remit.

About one third of the respondents to this question considered that the implementation of mechanisms to promote sustainability disclosure and accountability was solely the duty/in the remit of company laws or market regulators.

More than half of respondents considered that the responsibility to implement mechanisms to promote sustainability disclosure and accountability was jointly held by the exchange, the regulator and by the passing of Company Law.

The response to this question indicates that there is a strong need for investors and other interested stakeholders to engage with both market regulators and policymakers on framing roadmaps and using policy levers to progressively install ESG disclosure and accountability requirements within their markets.

Accountability for ESG disclosure

Enforcement and accountability of ESG disclosure and performance requires important consideration. It is vital that when an exchange or the market takes initial steps towards enhanced ESG disclosure, mechanisms to hold companies accountable for their disclosures are simultaneously created. Moreover, companies should not only inform stakeholders of ESG policies and performance, but can also build up credibility by reporting on how ESG aspects are integrated into Board/Senior Management compensation or incentives.

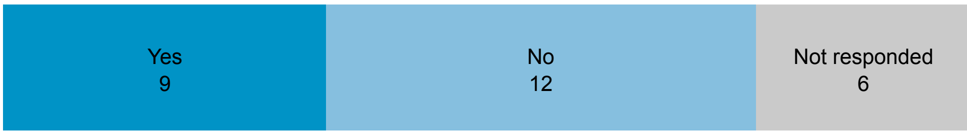
The media has a vital role to play in monitoring corporate accountability, and in most cases this is adopted fully, with the press now early to pick up on stories of corporate failings on human rights issues and environmental degradation. Investors are also becoming more actively conscious of their accountability for raising awareness of such issues with the management of companies they own, and are more and more actively using their vote at AGMs to press for information on sustainability disclosures and strategies.

While shareholders, the media and other stakeholders have a natural role to play in ensuring accountability once ESG disclosures become more commonplace, the role of an exchange and the regulatory authority must not be forgotten. Exchanges and regulators may require additional capacity for oversight of whether such disclosures are made and whether they comply with requisite standards. Yet, Corli le Roux, Head of SRI Index and Sustainability at Johannesburg Stock Exchange, pointed out in an interview for this report that additional capacity requirements should not be used as a reason for exchanges not to pursue ESG disclosure requirements. In fact, she said that exchanges can facilitate engagement by bringing issuers and investors together.

The creation of mechanisms for investors to comment on a company's ESG disclosure and/or performance, in fact, places more of an onus of tracking such disclosures on investors.

RESPONDENTS ARE SPLIT OVER POLICIES ON SHAREHOLDER FEEDBACK

Q9. Would your exchange consider enacting policy to encourage shareholders to comment on the quality of corporate sustainability reporting by issuers?



Units in this chart refer to the number of exchange entities.Source: Responsible Research, 2012

Commentary

In 2010, less than a third of respondents indicated that they would consider enacting policies to allow shareholders to comment on the quality of sustainability/ESG reporting. The 2012 response indicates some forward momentum: almost half of respondents (9 of 21) indicated that they would consider enacting such policies.

This question is centred on providing investors with a means to hold companies responsible for their sustainability disclosures. Singapore Exchange pointed out that this was an option that could be considered when "sustainability reporting is more mature", a sentiment also expressed by other exchange entities. Some exchanges, such as HKEx, have recently initiated market consultations that include considerations for appropriate feedback mechanisms on sustainability disclosure by listed companies.

INITIATIVES AROUND COMPANY MANAGEMENT ACCOUNTABILITY ARE BEING CONSIDERED

Q10. Has your exchange implemented listing requirements which mandate companies to report on environmental and social issues included in board/senior management compensation or incentives?

Units in this chart refer to the number of exchange entities. Source: Responsible Research, 2012

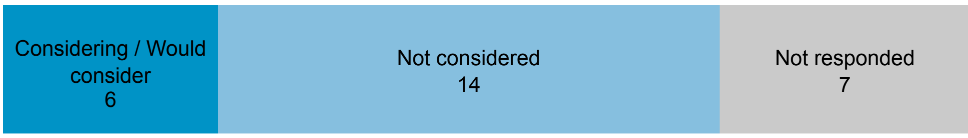
Commentary

The majority of respondents (12 of 21) indicated that they had not considered implementing listing requirements that mandated companies to report on environmental and social issues included in Board/senior management compensation/incentives. However, eight respondents expressed that such considerations were being considered/would be considered.

This is a marked increase in focus on E&S issues in comparison with the response in 2010. In 2010, an arguably less demanding question on whether the exchange would consider altering listing requirements to oblige companies to align incentives with long-term sustainable growth yielded a positive response from only three out of 16 of respondents.

A THIRD OF RESPONDENTS ARE MULLING SHAREHOLDER VOTING ON SUSTAINABILITY STRATEGIES

Q11. Has your exchange implemented listing requirements which mandate companies to put the approval of a company sustainability report and/or strategy to a (non-binding) shareholder vote at the AGM?



Units in this chart refer to the number of exchange entities. Source: Responsible Research, 2012

Commentary

In 2010, only two of 16 respondents indicated that they would consider altering listing requirements to oblige companies to put a proposal addressing ESG risks and opportunities to a non-binding shareholder vote at the AGM. While none of the exchanges have implemented such listing requirements yet, there are signs that more exchange entities may consider the option, with nearly one third (6 of 20) giving this response.

The question relates to one of many options available through which companies can be made more accountable for their sustainability disclosures and strategy. At this stage, it is useful to note that this is a more advanced requirement, which may explain why a majority of exchange entities have not yet considered such an option.

All the exchange entities that indicated in the 2012 survey that they would consider/are considering making such changes were from Asian markets.

D. PRODUCTS AND SERVICES

A range of ESG products and services can be offered by stock exchanges. These typically include complimentary or subsidised training and awareness provided to issuers and other market participants, the creation of Elite Boards, the development of sustainability indices as well as the facilitation of carbon markets. It is important to recognise that these offerings currently present limited direct revenue drivers to stock exchanges.

There are several different models of sustainability indices ranging from multi-sector, 'best-in-class' approaches such as the Dow Jones Sustainability Index (which identifies a varied group of companies with the most sustainable business practices) to those containing companies selected for their sustainability focused business models (e.g. clean tech indices, low carbon indices, water solutions indices, etc). Some exclude 'high ESG impact' sectors, whilst others do not.

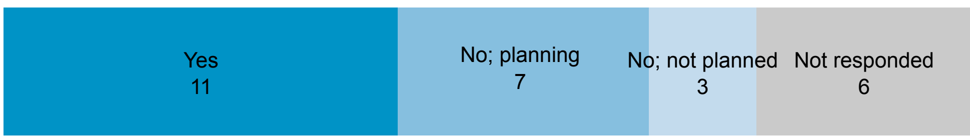
Besides their potential for revenue generation, one thing sustainability indices do well is catalyse improved levels of disclosure among issuers. As such ESG indices are commonly identified by stock exchanges as among their most successful and impactful sustainability initiatives. Anecdotally, companies that are included in an index subsequently tend to take strong steps to maintain their position even if the index's ESG disclosure standards tighten. Research by the Villanova School of Business, tracking additions and removals from the Calvert Social Index, has also shown that market capitalisation tended to be affected negatively by a company being removed from an index, though the period of monitoring was relatively short.[17]

However, ESG indices launched by several exchanges (particularly in emerging markets) have so far had limited success in attracting investors to use them for benchmarking portfolios. Investors, as they become more mature in their adoption of the principles of responsible investment, seem increasingly more inclined to integrate proprietary 'responsible investment' analysis into their decision-making (so-called ESG integration) rather than passively tracking an index.

The creation of an Elite Board allows a stock exchange to promote top-performing companies to a higher regulatory status than their lesser-performing peers. To gain admittance to the Elite board, companies must adhere to specific standards (primarily focused on governance practices thus far) set down by the stock exchange, which surpass the general listing requirements and/or company law. It is an example of regulatory dualism and a voluntary initiative that can catalyse interest in improved disclosure and governance among listed companies in a particular market. Stock exchanges do this in order to tier their listings, encourage improved transparency, reward improved practices and attract Foreign Institutional Investors (FIIs).

SUSTAINABILITY INDICES ARE THE MOST POPULAR SUSTAINABILITY INITIATIVE

Q12. Does your exchange offer any sustainability-related investment indices?



Units in this chart refer to the number of exchange entities. Source: Responsible Research, 2012

Commentary

Around half (11 of 21) of the responding exchange entities have now established such indices. This is a similar proportion to the response in 2010, when eight out of 16 respondents had established sustainability indices. In 2010 seven respondents planned indices and, of these, three have been established. Bursa Malaysia and SGX have both reiterated their plans to do so in future, whereas HKEx has for now decided not to launch an index of its own given the launch of the Hang Seng Corporate Sustainability Index in July 2010. Of the ten responding exchange entities that have not thus far created a sustainability index, seven plan to do so.

The JSE has identified its SRI index as its most successful sustainability initiative, indicating that, over time, the index generated a tremendous response from listed companies. In its survey response, the Swiss exchange also considered the creation of a sustainability index as a possible option to encourage sustainability disclosure.

In an interesting observation, one exchange respondent, which recently launched an ESG index, stated that while it believed that the move would encourage companies to disclose more information, it still felt the need for investors and regulators to play a more prominent role in demanding the relevant information for better investment decisions to be made.

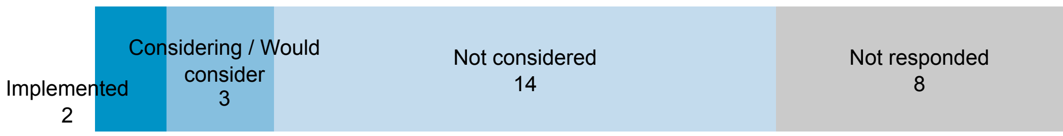
Other types of sustainability indices relate to a particular theme. The Nasdaq OMX family of Green Economy Indices offers investors several index options to track stocks in areas such as energy efficiency, renewable energy generation, pollution mitigation and advanced materials. Similarly, other exchanges have created markets or indices that cater to such demand.

Istanbul Stock Exchange, Stock Exchange of Thailand and Bursa Malaysia are thought to be advanced in their plans for developing respective sustainability indexes. The Bombay Stock Exchange announced the launch of its carbon themed index late in February 2012. The Toronto Stock Exchange is also investigating market interest for a sustainability index.

Of the three exchange entity respondents that had no plans to develop a sustainability index, one indicated that index provision relating to companies on its exchange was already being undertaken by private financial companies.

ELITE BOARDS ARE NOT A CONSIDERATION FOR THE MAJORITY OF RESPONDENTS

Q13. Has your stock exchange implemented other initiatives such as the creation of 'Elite Board' on the basis of a listed company's sustainability or governance credentials?



Units in this chart refer to the number of exchange entities. Source: Responsible Research, 2012

Commentary

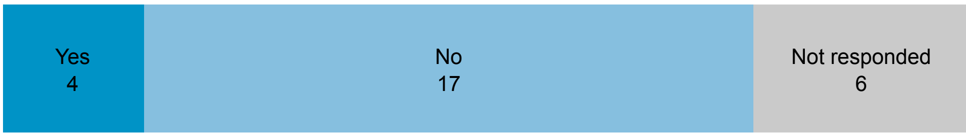
Only two of 19 respondents to this question indicated that they had created an "Elite Board" on the basis of a listed company's sustainability or governance credentials. The overwhelming majority of respondents (14 of 19) indicated that they had not considered the creation of such a board.

While this is potentially 'low hanging fruit', it is not an option that has gained much traction among exchange entities. Some have suggested that the development of sustainability indices in their markets (either by the exchange or a financial services company) obviate the need for such a board. In other cases, there are already a number of boards with different listing standards, so the impact of an extra board may be diluted.

Regulatory dualism has been particularly successful in Brazil where the Novo Mercado, a listing segment of BM&FBOVESPA, is credited with helping the exchange attract more international investors. Brazilian companies now aspire to achieve the superior standard set by this elite board, even though some of the standards are higher than local regulations require. BM&FBOVESPA stated in an interview for this report that the majority of IPOs coming to the market aspire to Novo Mercado status, in fact, this was the case of 75 percent of the IPOs since 2004.

CARBON TRADING PLATFORMS ARE NOT A MAINSTREAM INITIATIVE

Q14. Does your exchange offer platforms for the trading of carbon credits or the development of carbon markets, renewable energy/energy efficiency certificates or other environmental markets?



Units in this chart refer to the number of exchange entities. Source: Responsible Research, 2012

Commentary

Only four of 21 respondents indicated that their exchange offered platforms for the trading of carbon credits or the development of carbon markets, renewable energy/energy efficiency certificates or other environmental markets.

Carbon markets are driven primarily by legislation, though there are examples of voluntary markets. While the lack of a global binding agreement following the Durban conference is likely to slow the adoption of carbon markets, governments are still implementing them as a tool to raise the visibility of carbon in their domestic markets in preparation for future reductions. Other types of environmental market are not yet in favour.

Some exchanges, including the Johannesburg Stock Exchange, the Tokyo Stock Exchange and the Korea Exchange have considered/ are considering the feasibility of developing platforms for carbon trading. The Stock Exchange of Hong Kong conducted a market consultation on carbon trading platforms in 2009.

Another factor to consider is that many securities exchanges have no other involvement in commodities trading and therefore carbon exchanges are not a natural fit. It will be more useful to consider this issue further in the context of a review of sustainability at commodities exchanges.

HALF OF RESPONDENTS OFFER SUSTAINABILITY TRAINING

Q15. Do you include sustainability-related courses in your external training programmes?

Units in this chart refer to the number of exchange entities. Source: Responsible Research, 2012

Commentary

The inclusion of training courses related to sustainability in external programmes run or facilitated by the exchanges – which may be directed at issuers, investors, brokers, analysts and other exchange stakeholders – is an important early step in creating market awareness on these issues. A number of exchange entities that have embarked on these initiatives have found that issuers and market participants such as traders and brokers are unaware of terms such as ESG and sustainability reporting. To this end, exchanges have sponsored training programmes and provided listed companies with access to related tools and methodologies.

An example of where this has been successful is at BM&FBOVESPA in Brazil. In line with its new "report or explain" initiative for listed companies, it held training workshops in partnerships with the Global Reporting Initiative (GRI) to prepare companies to make relevant disclosures.

Several exchanges consider the existing reporting requirements in their markets to be adequate, but suggest that the understanding of those reporting requirements (and perhaps, their implementation) needs to be improved. The Toronto Stock Exchange is one example. Given the findings of a review in 2009, it considers that additional disclosure requirements are premature, but instead held workshops in four Canadian cities during 2011 on environmental and social disclosure to help its issuers better understand their regulatory disclosure requirements and learn how institutional investors use the information.

Deutsche Börse has adopted a novel approach to improving awareness among investors, issuers and other stakeholders that differs from the 'training' approach. It has invested in a web portal that provides investors, advisors and asset managers with open-source ESG data (high level scores for ESG) for 1800 companies.[18] Julia Taeschner, Head of Corporate Responsibility, Deutsche Börse, explains that while this initiative may evolve further, it demonstrates that exchanges can provide such infrastructure to encourage ESG disclosure, facilitate it and provide investors with easy access to relevant information.

E. KEY DRIVERS

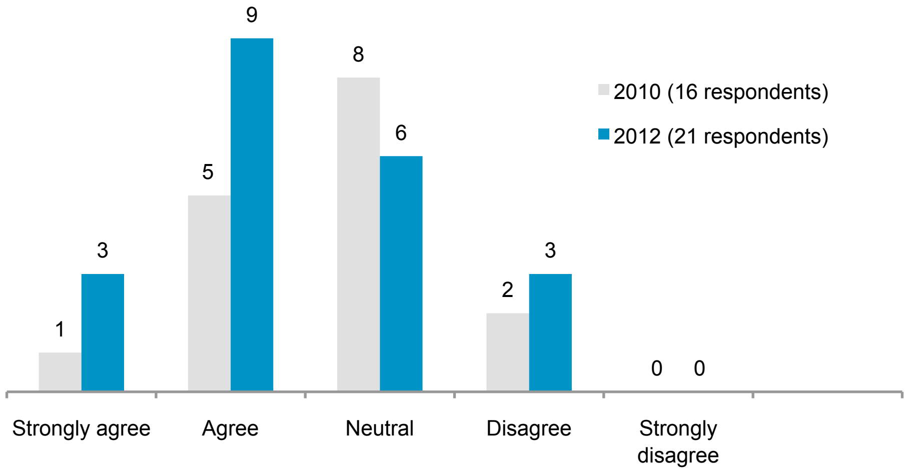
The development of a fully functional mechanism in which material, comparable, consistent and reliable ESG disclosures are made requires a facilitative market. The key components missing in many markets appear to be limitations in listed companies' readiness for ESG disclosure, lack of regulatory facilitation and insufficient investor pressure for this. Stock exchanges have indicated that there needs to be more involvement from local investors as well as greater clarity on what disclosure levels investors seek.

While there is merit in an argument that suggests that markets will naturally evolve adequate mechanisms, there are also valid concerns that there are inherent market characteristics that work against long-term interest. The most recent Sustainability Survey by GlobeScan and Sustainability in January 2012 found that 88 percent of respondents across businesses, NGOs, academia and government felt the pressure for short-term financial results was a barrier to businesses becoming more sustainable.[19]

HALF OF RESPONDENTS SEE A BUSINESS CASE FOR SUSTAINABILITY INITIATIVES

Q16. How much do you agree with the following statement?

Statement: "Having strong sustainability requirements for listed companies makes good business sense for a stock exchange"



Units in this chart refer to the number of exchange entities. Source: Responsible Research, 2012

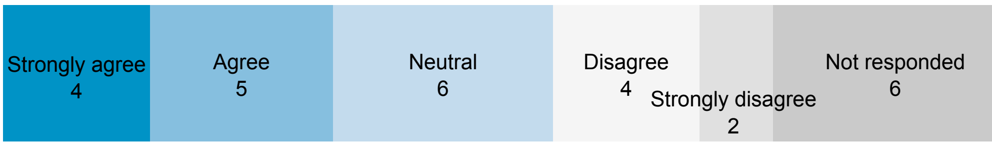
Commentary

The statement on whether strong sustainability requirements for listed companies made good business sense for a stock exchange saw growing support. Over half (12 of 21) of respondents agreed/strongly agreed to this view this year, while only three disagreed. This was a significant increase in support from the third (6 of 16) that agreed/strongly agreed in 2010. It is noteworthy that all exchange entities that agreed/strongly agreed with the statement in 2012 were from emerging markets. This lends further support to the view that many emerging market exchanges view stronger ESG credentials as a differentiating and reputation-enhancing factor.

VIEWS ARE MIXED ON REGULATORY INTERVENTION TO MANDATE DISCLOSURE

Q 17. How much do you agree with the following statement?

Statement: "Regulators should consider mandating stock exchanges to make listed companies disclose their sustainability practices (i.e. voluntary initiatives are inadequate)"



Units in this chart refer to the number of exchange entities. Source: Responsible Research, 2012

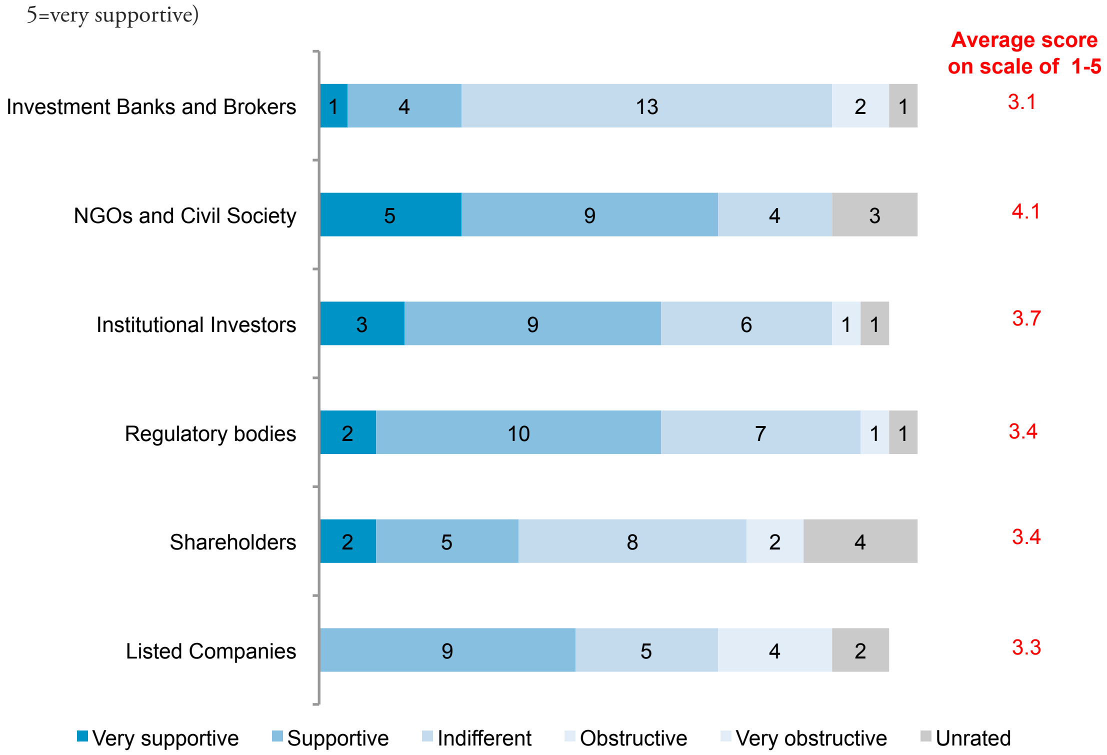
Commentary

In 2012, nearly half (9 of 21) respondents agreed/strongly agreed with the view that regulators should consider mandating stock exchanges to make listed companies disclose their sustainability practices (i.e. voluntary initiatives are inadequate). While this represents a minority of respondents, it is a remarkable shift from the response in 2010 when three quarters of respondents felt that regulators should not move to mandate exchanges to make listed companies disclose their sustainability practices (i.e. they felt that voluntary initiatives were adequate).

This response, together with that of Q19, which found that regulators are in some cases an obstacle to implementing sustainability initiatives, highlights that investors should engage with the regulators directly and that the exchanges will likely be supportive in this dialogue.

NGOS AND CIVIL SOCIETY MOST SUPPORTIVE ON SUSTAINABILITY; INVESTMENT BANKS AND BROKERS INDIFFERENT

Q18. On a scale of 1 to 5, how supportive have the following stakeholders been towards stock exchange-led sustainability initiatives? (1= very obstructive; 2=obstructive; 3=indifferent; 4=supportive; 5=very supportive)



Units in this chart refer to the number of exchange entities. Source: Responsible Research, 2012

Notes:

1. This question considers responses from the 21 survey respondents
2. Unrated: refers to cases in which a respondent did not rate a particular stakeholder group for its support
3. Toronto Stock Exchange rated Institutional Investors and listed companies as both 3 & 4, given the two distinct characteristics exhibited by these groups

Commentary

This question attempted to discover where exchanges were finding support in tightening disclosure requirements and other sustainability measures.

“NGOs and Civil Society” were identified as the stakeholder group that was most supportive of sustainability initiatives by an exchange, and investors were the next most supportive stakeholder group. It is noteworthy that six of the respondent exchange entities identified institutional investors as indifferent to sustainability initiatives.

According to the survey results, the exchanges’ shareholders, regulatory authorities and listed companies themselves were, on average, indifferent to mildly supportive of exchange-led sustainability initiatives.

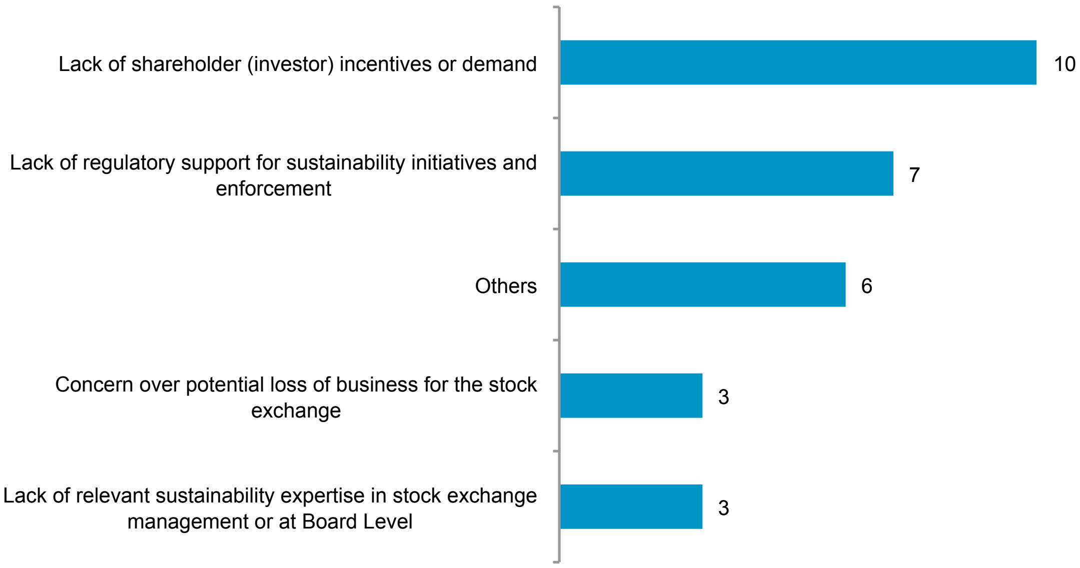
The least supportive stakeholders were the investment banks and brokers. These are key advisers to companies at IPO, a critical stage of corporate evolution. Their lack of support is an area that investors should seek to address.

LACK OF REGULATORY SUPPORT AND WEAK INVESTOR DEMAND REMAIN OBSTACLES TO SUSTAINABILITY INITIATIVES

Q19. Have any factors discouraged your exchange from introducing and implementing listed company related sustainability initiatives?

Units in this chart refer to the number of exchange entities. Source: Responsible Research, 2012

What were the discouraging factors? (As indicated by the 13 respondents that identified discouraging factors)



Units in this chart refer to the number of exchange entities. Source: Responsible Research, 2012

Commentary

13 of the 21 respondents identified factors that had discouraged them from introducing and implementing listed company related sustainability initiatives.

The most common factor identified was the lack of investor demand. Deutsche Börse also pointed to the lack of disclosure by investors on how sustainability criteria were used in their investment decisions as a discouraging factor; this view was echoed in our interviews with exchange entities. This clearly shows that investors have a significant role to play in encouraging disclosure at exchanges (as well as companies). The increasing take up of responsible investment principles should result in greater engagement on the issues by investors, while the adoption of Codes on investor behaviour, such as the UK's Stewardship Code, should also assist. Some exchanges noted that local investor demand was also an important driver for stock exchanges to further sustainability initiatives and could not be substituted entirely by Foreign Institutional Investors (FIIs).

The lack of regulatory support for sustainability initiatives and enforcement was consistently identified as a discouraging factor, as were regulatory limitations and the fact that the exchange was not mandated to make the required changes. This highlights that investors will need to engage regulators directly. The response to Q17 indicates that the exchanges may be helpful in this dialogue.

The responses also suggest that although a minority of respondents are concerned that the implementation of sustainability initiatives could potentially lead to a loss of business (one specifically stated that "introducing binding sustainability reporting guidelines might overburden certain participants and distort the competition"), the majority of respondents (86 percent, or 18 of 21) have no such concerns.

This was further supported by the fact that, when questioned, no exchange respondent indicated they were aware of an issuer that had decided not to list on their exchange because of sustainability disclosure requirements. This situation may not have been properly tested yet as most implementation has been conducted on the basis of comply or explain. In the 2010 survey, none of the exchanges even responded to this question. It was possibly too early for exchanges to make an informed response at that time.

IV. SUSTAINABILITY LEADERS AND ENABLING FACTORS

It is difficult to establish which stock exchanges lead on sustainability given the disparities across markets. Exchanges around the world are at different stages of evolution. Progress made on their individual sustainability roadmaps is also varied. In the near future, perhaps the most critical sustainability benchmark that they will be measured against will be a combination of:

- The percentage of issuers by market cap (and number) that make ESG disclosure;
- The quality (determined by aspects such as materiality, reliability, consistency, etc) of that disclosure;
- Mechanisms provided by that market for investors to hold companies accountable on sustainability criteria.

The exchange entities in the SSE Survey were asked to identify an exchange they considered to be a leader on issuer sustainability initiatives. Although only 12 exchange entities responded to this question, it is noteworthy that the JSE and BM&FBOVESPA were by far the most commonly named. The reasons typically cited for these selections included the “comply or explain” reporting regime (both exchanges), integrated reporting focus (JSE) and the effective launch of an elite board (BM&FBOVESPA). HKEx, for its own high standards of ESG disclosure, and the TMX, for “creating market niches dedicated to companies with sustainability profiles”, were among the other exchange entities mentioned in this category. It is important to note here that there has been no attempt to rank the exchanges and no guidelines were given to respondents either.

This is a changing landscape. The pace and depth of change are determined by various factors. The survey responses and interviews held to inform this report offered insights into how stock exchanges were navigating a course on their sustainability agendas. There are several lessons on enabling factors that stock exchanges can offer to each other as well as to investors seeking to enter into a dialogue with them.

Enabling factors identified across markets and some recent associated initiatives have been identified below. Note that each factor may not be applicable in every market.

Enabling factors

Plug into and facilitate the ESG ecosystem. Exchanges must maintain an ongoing engagement with the ESG investment and corporate ESG disclosure ecosystem. This would entail engagement with organisations involved in developing ESG reporting standards and participating in their working groups and committees as well as close quartered engagement with the responsible investment community, including involvement with the PRI groups. Listed companies can also be shepherded through an organic process in which several and frequent consultations are held and facilitated by the exchange on ESG disclosure. An example of this was the HKEx sponsoring five free half-day seminars and 10 free full-day workshops by external ESG reporting experts on ESG reporting for listed companies, based on its draft ESG Reporting Guide (May to July 2011). More than 800 participants from nearly 500 issuers attended the seminars and over 500 participants from nearly 350 issuers attended the workshops.

Senior management commitment. Senior management commitment and interest is an important component of an exchange’s sustainability initiatives, particularly when they are launched. Referring to BM&FBOVESPA’s recent initiative to ask listed companies to publish a sustainability report or explain why they had not, Sonia Favaretto, Sustainability Officer, BM&FBOVESPA explained that, “when the letter comes from the first executive of the exchange, the market treats it as more important.” At BM&FBOVESPA as well as other stock exchanges that have been on the vanguard of such initiatives, senior management leadership and support has often been crucial.

Investment in implementation capacity. Almost half (9 of 19) respondents to a question on internal training on sustainability indicated that they had such programmes at their exchange. The investment in a sustainability team/committee whose functions are integrated with the relevant departments within the exchange is important – particularly if an exchange plans to develop and implement a full-fledged sustainability strategy. If not in the form of a distinct sustainability team, departments, particularly those related to listings and regulations, should have additional sustainability mandates and capacity to implement them.

The provision of training to senior management and other staff members also helps create a sense of value that these initiatives have. Moreover, trained professionals are better placed in engaging with listed companies on sustainability issues. Internal training should therefore be one of the early and repeated milestones on an exchange's sustainability roadmap.

Publication of ESG reports. Many stock exchanges have found it useful to produce their own ESG disclosures, either in the form of a standalone sustainability report or an integrated report. Some 18 of 19 respondents to a survey question gauging the stock exchange's own level of ESG disclosure indicated that they disclosed information on ESG issues that affected their business model. While this is an overwhelming majority, it must be noted that the quality of this disclosure varies significantly from single paragraph notes on a philanthropic programme to a more advanced GRI corporate responsibility report or an integrated report. Demonstration of leadership to listed companies, board focus on these issues and employee concern were the most common reasons cited for making such disclosures. Comments from discussions held with some exchanges also reveal that this allows exchanges to understand the process, time and capacity that may be needed by issuers to produce their own reports.

While an exchange's internal sustainability performance and listed companies-related activities take centre stage in such reports, in future, the value of such reports will be gauged by what is arguably the most material information that these reports should convey: the depth of ESG disclosure by companies in its market and the quality of the information provided. This is an indicator that exchanges could use as one of their own targets – though the response to Q3 highlights that so far none of them have done so, at least in respect of climate change disclosure by companies listed on their respective exchanges.

Feed off and facilitate national sustainable development frameworks and goals. Speaking at the World Investment Forum conference in Xiamen in 2010, Ms Selvarany Rasiah, Chief Regulatory Officer, Bursa Malaysia, revealed that a key component of the success of their sustainability initiatives has been an environment in which the government has provided incentives to companies for their sustainability practices.[20] The Malaysian Prime Minister's budget announcement, accompanied by a statement in favour of sustainability disclosure, was just the support that the exchange required. Similarly, the interest from companies that the JSE's SRI index and other sustainability efforts elicited was partly as a consequence of the facilitative environment created by the King Codes. Most recently, in February 2012, the Bombay Stock Exchange's carbon-themed index, GREENEX, was launched by India's Corporate Affairs Minister. His ministry had prepared a guideline for voluntary disclosure in the previous year.[21] This index also relates to India's evolving domestic energy efficiency policy. Similar developments have been seen in China and in other markets.

Expectations to generate significant revenues from sustainability initiatives and products, at least in the near term, are often misplaced. Discussions held with some exchanges to inform this report provide a lesson that exchanges embarking on sustainability initiatives and launching products should not think of making profits from every initiative. For example, sustainability indices have not been known to significantly contribute to earnings so far. Exchanges see their initiatives as investments. For example, Deutsche Börse's data offering on its website – purchased from a sustainability research provider – is free of cost to users and does not earn them any revenue. An exchange not wishing to be named stated that, "the market is still under development and players must learn to invest." The primary business proposition of sustainability initiatives for the near-term therefore remains as a way to build trust, credibility and quality in the market.

Re-interpretation of materiality within existing standards. Another avenue that calls for much further exploration and innovation is the interpretation of existing norms. Existing norms that relate to materiality can provide a ready-made framework within which ESG issues can be integrated. This requires concerted awareness and re-education – and an improvement of disclosure under existing requirements. The Toronto Stock Exchange reported that it educates issuers about the requirements of Canadian securities regulators along with relevant provincial securities regulators and institutional investors (including PRI signatories) for environmental and social disclosure.

V. ISSUES FOR CONSIDERATION BY MEMBER STATES AT RIO+20

Urgent yet thoughtful political intervention can potentially make this global dialogue more effective in a shorter time span. The nature of market ecosystems and the complexity of accountability can, at times, pose impediments to the extent of action that stock exchanges and market regulators may want to take on sustainability initiatives. Moreover, today's capital markets are shaped by forces that inherently externalise a range of sustainability factors that require urgent consideration.

The findings of this year's SSE Survey clearly suggest that policymakers have a role in facilitating this shift. Some 80 percent of respondents to the survey welcomed a global approach to consistent and material corporate sustainability reporting. Further, 75 percent of respondents favoured a 'convention on corporate sustainability reporting' where governments are asked to consider mandating the boards of companies to (a) consider sustainability issues in strategy discussions, (b) integrate those sustainability issues that they consider to be material into their Annual Reporting and, (c) explain why they do not comply if that is the case.

Policymakers can now move to throw their weight behind introducing guiding principles and a roadmap to enhance ESG disclosure by companies in their markets, as well as formalising mechanisms to hold companies accountable for those disclosures. While ESG disclosure requirements must be characterised by local contexts, a minimum level of comparability across markets is envisaged.

In this context, the call for an International Policy Framework by the Corporate Sustainability Reporting Coalition (CSRC), which includes over 40 organisations, including institutional investors representing approximately US$ 2 trillion, is noteworthy. The call was launched at the UNGC's Private Sector Forum in September 2011 by Paul Abberley, CEO of Aviva Investors, London. The coalition is appealing to UN member states to commit to develop a Convention on Corporate Sustainability Reporting at the 2012 UN Conference on Sustainable Development (Rio+20).

The four key principles that the CSRC has identified to guide the development of this international policy framework are worth referencing:

1. **Transparency** – Companies should be required, on a comply or explain basis, to integrate material sustainability issues within their report and accounts.

2. **Accountability** – There should be effective mechanisms for investors to hold companies to account on the quality of their disclosures, including for instance through an advisory vote at the AGM.

3. **Responsibility** – Board duties should explicitly include setting the company's values and standards and ensuring that its obligations to its shareholders and other stakeholders are understood and met.

4. **Incentives** – Companies should state in remuneration reports whether the remuneration committee considers ESG factors which are of material relevance to the sustainability and long-term interests of the company when setting remuneration of executive directors; aligning remuneration with the interests of shareholders and other key stakeholders, including customers and employees.

For more details on the CSRC and its supporting organisations, please visit:
http://www.aviva.com/corporate-responsibility/programme-updates/15615/

For a list of CSRC colation participants please see page 43.

APPENDICES

The importance of ESG disclosure by companies

Corporate sustainability practices are relatively straightforward to categorise into the three pillars of environmental, social and governance issues. As shown in Figure 1, indicators are isolated and monitored to provide information to investors and other stakeholders on management's leadership in sustainability issues. Global standards of quantitative measurement of the individual criteria in each section continue to prove elusive, despite much collaboration between investors, companies, investment banks, industry associations and accountancy firms.

Figure 1. Possible quantifiable indicators of corporate ESG practices

ENVIRONMENT	SOCIAL	GOVERNANCE
Energy efficiency	Employee compensation	Board independence
Carbon emissions	Benefits	Board attendance
GHG emissions	Staff turnover	Shareholder voting
Biodiversity targets	Employee health	Litigation risks
Water usage	Safety practices and targets	Directors and management compensation
Natural resource use	Training spend and coverage	
Recycling practices	Diversity and targets	
Waste to energy		

Over the past decade, companies have been disclosing more and more information about their ESG practices. Of the three areas of disclosure, there has been a wider acceptance of the requirement for improved levels on corporate governance indicators, in particular. This is partially rooted in public and financial sector outcries to scandals such as the massive accounting discrepancies discovered recently at Olympus and details of seemingly disproportionate executive compensation at financial institutions, even at a time when many of them are being bailed out by tax payers and struggling to maintain profitability. Additionally, as a result of regulatory requirements and jurisdictional oversight, corporate management has been detailing good governance initiatives for a longer period than environmental or social activities.

However, there are signs that corporates – and other key stakeholders – are catching up to importance of disclosure on environmental and social factors too. Witness the attention given to Apple's recent disclosures on its supply chain, which has highlighted a group of Asian companies with an extremely bad track record on labour issues.

Labour scandals in Asian supply chains bring investor scrutiny

Photo by Jurvetson (flickr)

Realisation is growing too that inaction on ESG issues can have a material impact on a company's ability to sustain growth, or even in extreme cases survive. To take one environmental indicator as an example, the systemic risks associated with carbon are enormous. In 2011, a study called 'Unburnable Carbon' revealed that if the chances of exceeding 2°C warming was to be limited to 20 percent, the world would have to limit itself to a budget of 565 $GtCO_2$ until 2050.[22] However, given that the known global fossil reserves are estimated at 2795 $GtCO_2$, (i.e. existing assets were five times the budget to 2050) this has significant implications for asset values. In fact, the study found that the top 100 listed coal companies and the top 100 listed oil and gas companies alone represent potential emissions of 745 $GtCO_2$. If the ability to burn these fuels were to be restricted evenly across all assets, 80 percent of these reserves would be rendered unburnable. This is a systemic risk and investors could be left with 'stranded assets' if enforcement were to materialise.

The ability to profit from coal is at stake

Investor-led sustainable stock exchange initiatives at Ceres

Ceres' Investor Network on Climate Risk (INCR), representing AUM of over US$10 trillion, has also established a working group on Sustainable Stock Exchanges. This working group is a forum through which participating investors can engage primarily with the North American stock exchanges on ESG issues. Participants are committed to seeking to improve exchanges' internal sustainability performance, their understanding of the ESG disclosure landscape, and to encouraging them to organise and encourage ESG training for company executives and directors.[23] The ultimate goal for the Ceres initiative, according to Tracey Rembert, Senior Manager for Investor Engagement at Ceres, is a listing standard by exchanges on sustainability reporting.

INCR participants in the North American stock exchange engagements in 2011 represented AUM between US$4.5 trillion and US$5.5 trillion, depending on the exchange. Members have also participated in outreach and dialogue with trade associations that have influence over stock exchange activities, such as the Society of Corporate Secretaries and Governance Professionals and the World Federation of Exchanges.

Although the dialogue is still at an early stage, it has spurred robust discussion between investors and stock exchanges about disclosure expectations on ESG issues in the broader capital markets, the challenge of getting companies to disclose comparable data sets that are relevant and material throughout an industry, and the fact that investors themselves still don't have consensus on specific KPIs that should be disclosed by sector. Dialogues "require companies, exchanges and investors at the table to be more precise in their definitions" in order to reach that consensus. The outcomes envisaged are similar to those of the PRI and relate to clear and consistent ESG (including forward looking) disclosure by listing companies, with mechanisms for investors to hold companies to account. Integrated reporting and the GRI are also broached with every exchange on the INCR focus list.

Ceres notes that many of the large investors involved in this engagement consider this strategy to be the most efficient means for them to eventually obtain more reliable and comparable sustainability data. As 'responsible investors', they feel they need consistent data that can be included in their models and that allows them to vote with confidence across sectors and geographies on a wide range of ESG issues. The INCR Working Group also stresses the importance of each exchange meeting with its market regulator to discuss the evolving landscape of ESG disclosure.

CSRC coalition participants

Aviva

Aviva Investors

Association of Chartered Certified Accountants

BioRegional

BT Pension Scheme Management Limited

CA Cheuvreux

Carbon Disclosure Project

Calvert Investment

Ceres

Church of Sweden

Climate Change Capital

Climate Disclosure Standards Board (CDSB)

Colonial First State Global Asset Management

CorporateRegister.com Limited

Cyrte Investments

Delta Lloyd Asset Management

EIRIS

Environment Agency Active Pension Fund

Ethos Foundation

Forum for the Future

Fronesys

FRR Fonds de réserve pour les Retraites

FTSE

Generation Investment Management

Global Reporting Initiative

Hermes

Illac Ltd

MN-Services

Numaï Partners

PaxWorld Management LLC

Peace Child International

Rabobank Pensionfund

Save the Children

Sparinvest Group

Stakeholder Forum

The Co-operative Asset Management

Traidcraft

Trillium Asset Management, LLC

Triodos Investment Management B.V.

UNCTAD*

UN Global Compact

UN PRI

University of St Andrews Endowment Fund

Via Gutenberg

Vigeo

VIP eV

WWF-UK

Research into exchanges and sustainability – a summary of findings since 2009

2009

August - The World Federation of Exchanges (WFE) publishes a report *Exchanges and Sustainable investment*, which presented the landscape of sustainable investment related measures that its member exchanges had taken.[24]

November - Cheuvreux, the first investment bank to become a PRI signatory, puts out a study saying that while exchanges could potentially play an active role in the development of indices geared towards tracking various sustainability metrics, they had "lost market leadership in index production" to index providers, at least in developed markets.[25]

2010

September - *Sustainable Stock Exchanges: Real Obstacles, Real Opportunities*, the predecessor to this report, is published. It provided an assessment of the sustainability structures and practices at 30 of the world's largest stock exchanges by market capitalisation and provides guidance on initiatives that can be undertaken by stock exchanges.[26]

September - EIRIS, a provider of independent investment research on the ethical and ESG performance of companies, publishes the report *Sustainable Stock Exchanges: Improving ESG Standards among Listed Companies*. The report reaffirms the view that stock exchanges have a major role to play in mitigating investment risk and that they had "adopted a patchwork of sustainability approaches" that could encourage ESG disclosure.[27]

September - WFE follows up its 2009 report with another *Exchanges, ESG and Investment Decisions*. The report notes that the Global Reporting Initiative (GRI) was advocating that by 2015 all large and medium-sized companies in OECD countries and fast-growing emerging economies be required to report publicly on their ESG performance or explain why they had not (the principle of 'comply or explain'). WFE also notes that South Africa has taken the lead on the integrated reporting front, a move driven by the close association and successful collaboration between the Johannesburg Stock Exchange, its regulator and the South African government pension fund.[28]

2011

June - A report commissioned by the IFC, *Assessing and Unlocking the Value of Emerging Market Sustainability Indices*, remarks on a proliferation of emerging market sustainability indices issued by both financial service companies and stock exchanges since 2004, with the majority of these having been launched since 2009.[29] The report also notes that these emerging market indices have enjoyed limited success in attracting a large investor base because investors are put off by the lack of transparency of the index construction and the methodological inconsistencies of strategies across different markets, which make it difficult to consistently incorporate the findings into global portfolio construction.

December - The Carbon Disclosure Project (CDP), a not-for-profit organisation working to drive greenhouse gas emissions (GHGs) reduction and sustainable water use by global businesses, publishes *Climate Resilient Stock Exchanges – Beyond the Disclosure Tipping Point*. The report assesses climate change disclosures made to CDP by companies listed on 31 of the largest stock exchanges.[30]

December - United Nations Conference on Trade and Development (UNCTAD) publishes *Corporate Governance Disclosure in Emerging Markets: statistical analysis of legal requirements and company practices*. The report inventories the disclosure requirements of 24 emerging market economies (plus the US, UK and Japan), and compares these to the actual disclosure practices of leading companies. The report uses as a benchmark the UNCTAD-ISAR Guidance on Good Practices in Corporate Governance Disclosure, which covers more than fifty disclosure items, including sustainability and corporate responsibility related disclosures.[31]

Integrated reporting

The International Integrated Reporting Committee (IIRC) was officially launched in August 2010 with the aim of publishing a framework for a global integrated reporting model that conveys a firm's strategic objectives, governance and business model, integrates both financial and non-financial information, and is comparable across markets.[32] Integrated reports provide material financial and ESG performance information and illustrate the linkages between the two. Companies, through integrated reporting, will be better able to demonstrate how their financial and nonfinancial performance supports the move towards a more sustainable society.

The IIRC has held initial meetings and consultations and has now embarked on a pilot programme that will inform the development of an integrated reporting framework. While a handful of companies have already established their own integrated reporting programmes, integrated reporting is in its infancy. As a market, South Africa has taken a lead on this front and has mandated the publication of integrated reports on an "apply or explain" basis.

While quality integrated reporting would add value and meet investor demands for greater sustainability disclosure, given the nascent stage of the development of such a framework, some investors accept that quality standalone sustainability reports serve the purpose at present. For their part, exchanges and listing authorities may encourage disclosure, and some indicate the possibility of a future requirement of integrated reporting. As outlined by Robert Eccles and Mervyn King in their work, the role played by the exchange will vary according to local legal frameworks – whether to design and implement a programme, encourage the regulator to do so or collaborate with companies, analysts, investors and accountants to develop a local model. Once a framework is in place, the exchange can certainly support the transition by hosting the reports on its website and holding seminars to understand the challenges of reporting in this way, especially when attempting to identify materiality. The more dominant the role of the exchange, the quicker the uptake is likely to be amongst listed companies.

Carbon as a reference point?

Among environmental and social issues, carbon intensity is the issue that has undoubtedly gained most prominence among governments, business and civil society. It is an issue that merits a great deal of attention both because of the severity of the associated risks and also because many leading businesses have already begun disclosing on carbon. Many have taken some, although largely inadequate, steps to reduce group emissions levels, or have begun to set targets for reduction.

The systemic risks associated with carbon are enormous. In 2011, a study called '*Unburnable Carbon*' revealed that if the chances of exceeding 2°C warming was to be limited to 20 percent, the world would have to limit itself to a budget of 565 $GtCO_2$ until 2050.[33] However, given that the known global fossil reserves are estimated at 2795 $GtCO_2$, (i.e. existing assets were five times the budget to 2050) this has significant implications for asset values. In fact, the study found that the top 100 listed coal companies and the top 100 listed oil and gas companies alone represent potential emissions of 745 $GtCO_2$. If the ability to burn these fuels is restricted evenly across all assets, 80 percent of these reserves would be rendered unburnable. This is a systemic risk and investors could be left with stranded assets if enforcement were to materialise.

This clearly makes the case for transparency on fossil fuel reserves and associated CO_2 emissions potential by companies, in addition to past and present emissions. The climate change impact management by listed companies globally requires considerable resourcing and attention. The Carbon Disclosure Project assessed disclosure levels on climate change within a universe of the world's 31 largest stock exchanges in December 2011. It found that 54 percent of the listed equity (assessed in terms of market cap rather than number of companies) disclosed climate change data.[34] The pervasiveness of disclosure and its quality varied significantly across and within markets. As many as eight exchanges had disclosure rates of over 70 percent on this basis. However, the statistics by total number of companies reveal that the percentage of companies (assessed in terms of number and not market cap) making climate change disclosures is very low.

Given the enormous and established risks associated with this issue as well as the greater, albeit varying, traction that climate change related disclosure has had, there is a case for carbon to be the first environmental issue on which stock exchanges or listing authorities across markets mandate consistent disclosure. However, other highly material, but less researched and well-known, environmental and social issues should not be sidelined in order to achieve this.

REFERENCES

1. The Sustainable Stock Exchange Initiative website: http://www.SSEinitiative.org accessed 8 March 2012

2. UNCTAD, 10 January 2012, The Future We Want, http://www.uncsd2012.org/rio20/content/documents/370The Future We Want 10Jan clean _no brackets.pdf accessed 8 March 2012

3. UNCTAD, 10 January 2012, The Future We Want, http://www.uncsd2012.org/rio20/content/documents/370The Future We Want 10Jan clean _no brackets.pdf

4. Earth Summit 2012 Towards agreement on a declaration for corporate sustainability reporting at Rio +20, Corporate Sustainability Reporting Coalition, September 2011 http://www.aviva.com/data/media-uploads/news/File/pdf/2011/aviva_earth_summit_2012.pdf accessed 8 March 2012

5. "A free option on the future: regulated securities exchanges beyond 2010"; Stephan Malherbe, Genesis Analytics; Siobhan Cleary, Johannesburg Stock Exchange; Nicky Newton-King, Johannesburg Stock Exchange. Published in 'Focus', no. 219, May 2011, by the World Federation of Exchanges. http://www.world-exchanges.org/focus/2011-05/m-2-1.php accessed 8 March 2012

6. Focus no 227 – January 2012, '2011 Aftermath'; World Federation of Exchanges. http://www.world-exchanges.org/focus/2012-01/m-1-1.php accessed 8 March 2012

7. John Carson: 'Self-Regulation in Securities Markets', January 2011: The World Bank Financial and Private Sector Development, Global Capital Markets Department, Securities Markets Group. http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2011/01/24/000158349_20110124091038/Rendered/PDF/WPS5542.pdf accessed 8 March 2012

8. World Federation of Exchanges Cost & Revenue Survey 2010 – November 2011. http://www.world-exchanges.org/files/statistics/excel/2010%20Cost%20&%20Revenue%20Survey_Final.pdf accessed 8 March 2012

9. World Federation of Exchanges Cost & Revenue Survey 2010 – November 2011. http://www.world-exchanges.org/files/statistics/excel/2010%20Cost%20&%20Revenue%20Survey_Final.pdf

10. BATS takeover of Chi-X Europe passes key test, Financial Times, 20 October 2011 http://www.ft.com/intl/cms/s/0/b70b10cc-fae7-11e0-bebe-00144feab49a.html#axzz1ms0pBaiJ accessed 8 March 2012

11. "A free option on the future: regulated securities exchanges beyond 2010"; Stephan Malherbe, Genesis Analytics; Siobhan Cleary, Johannesburg Stock Exchange; Nicky Newton-King, Johannesburg Stock Exchange. Published in 'Focus', no. 219, May 2011, by the World Federation of Exchanges. http://www.world-exchanges.org/focus/2011-05/m-2-1.php

12. Guide to Sustainability Reporting for Listed Companies, SGX, June 2011 http://rulebook.sgx.com/net_file_store/new_rulebooks/s/g/SGX_Sustainability_Reporting_Guide_and_Policy_Statement_2011.pdf accessed 8 March 2012

13. SEBI Board meeting press release, November 2011, http://www.sebi.gov.in/sebiweb/home/detail/22104/yes/PR-SEBI-Board-meeting accessed 8 March 2012

14. National Voluntary Guidelines on Social, Environmental & Economic Responsibilities of Business 2011, Ministry of Corporate Affairs, http://www.mca.gov.in/Ministry/latestnews/National_Voluntary_Guidelines_2011_12jul2011.pdf accessed 8 March 2012

15. Write up of the Sustainable Stock Exchanges 2010 Global Dialogue held at the World Investment Forum in Xiamen, September 2010 http://www.unpri.org/sustainablestockexchanges/conf2010/ accessed 8 March 2012

16. Guide to Sustainability Reporting for Listed Companies, SGX, June 2011 http://rulebook.sgx.com/net_file_store/new_rulebooks/s/g/SGX_Sustainability_Reporting_Guide_and_Policy_Statement_2011.pdf

17. How Third Party CSR Ratings Impact Share Price, Carbon49 blob, January 2012 http://www.carbon49.com/2012/01/how-third-party-csr-ratings-impact-share-price/ accessed 8 March 2012

18. Deutsche Börse launches information portal for sustainable securities/STOXX introduces Global ESG Leaders indices, April 2011 http://deutsche-boerse.com/INTERNET/MR/mr_presse.nsf/maincontent/9728096B9096FE2BC125786F00437B22?Opendocument&lang=en&newstitle=deutscheboerselaunchesinformat&location=home& accessed 8 March 2012

19. Financial Short-Termism a Major Obstacle to Sustainable Change in Business: Expert Poll, Globescan, January 2012 http://www.globescan.com/news_archives/tss12_short_termism/ accessed 8 March 2012

20. Write up of the Sustainable Stock Exchanges 2010 Global Dialogue held at the World Investment Forum in Xiamen, September 2010 http://www.unpri.org/sustainablestockexchanges/conf2010/

21. BSE to launch green index from today, The Hindu Business Online, February 2012 http://www.thehindubusinessline.com/markets/stock-markets/article2916433.ece?ref=wl_opinion accessed 8 March 2012

22. Source: http://www.istockphoto.com/stock-photo-8662169-open-pit-coal-mining.php?st=f81a6cc

23. Ceres INCR website page on Working Groups http://www.ceres.org/incr/about/working-groups accessed 8 March 2012

24. Siddy D., 2009, Exchanges and Sustainable Investment, WFE, http://www.world-exchanges.org/sustainability/WFE-ESG.pdf accessed 8 March 2012

25. Voisin S. and Walker R., November 2009, Sustainable Stock Exchanges, Chevreux, http://www.unpri.org/files/Cheuvreux-SustainableExchanges231109.pdf accessed 8 March 2012

26. Morales R. and, van Tichelen E., 2010, Sustainable Stock Exchanges: Real Obstacles, Real Opportunities, http://www.responsibleresearch.com/Responsible_Research___Sustainable_Stock_Exchanges_2010.pdf accessed 8 March 2012

27. EIRIS, 2010, Sustainable Stock Exchanges: improving ESG standards among listed companies, http://www.eiris.org/files/research publications/SustainableStockExchanges2010.pdf accessed 8 March 2012

28. World Federation of Exchanges, September 2010, Exchanges, ESG and investment decisions, http://www.world-exchanges.org/files/statistics/excel/WFE ESG publication .pdf accessed 8 March 2011

29. IFC, June 2011, Assessing and Unlocking the Value of Emerging Market Sustainability Indices, http://www1.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/ifc+sustainability/publications/publications_report_assessingemergingmarketssustainabilityindices__wci__1319576622735 accessed 8 March 2011

30. Topping N. and Sokell D., December 2011, Climate Resilient Stock Exchanges – Beyond the Disclosure Tipping Point, Carbon Disclosure Project, https://www.cdproject.net/CDPResults/CDP-2011-climate-resilient-stock-exchanges-white-paper.pdf accessed 8 March 2011

31. Corporate Governance Disclosure in Emerging Markets, December 2011 http://www.unctad.org/en/docs/diaeed2011d3_en.pdf accessed 8 March 2012

32. The International Integrated Reporting Committee website http://www.theiirc.org/about/the-work-plan/ accessed 8 March 2012

33. Leaton J., 2011, Unburnable Carbon – Are the world's financial markets carrying a carbon bubble?, Carbon Tracker Initiative, http://www.carbontracker.org/wp-content/uploads/downloads/2011/07/Unburnable-Carbon-Full-rev2.pdf

34. Topping N. and Sokell D., December 2011, Climate Resilient Stock Exchanges – Beyond the Disclosure Tipping Point, Carbon Disclosure Project, https://www.cdproject.net/CDPResults/CDP-2011-climate-resilient-stock-exchanges-white-paper.pdf

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