#### TRENDS IN SUSTAINABILITY DISCLOSURE:

# BENCHMARKING THE WORLD'S COMPOSITE STOCK EXCHANGES

A PAPER PREPARED FOR THE SUSTAINABLE STOCK EXCHANGES 2012 GLOBAL DIALOGUE, HOSTED BY UNCTAD





Written by: CK Capital Commissioned by: Aviva Investors June 2012

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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 are the sole responsibility of CK Capital. The contents of the report do not necessarily reflect the official views of Aviva Investors, the Principles for Responsible Investment as an organization or its signatories, the UN Global Compact, the UNCTAD Secretariat or its member States.

Comments on this paper are invited and may be addressed to the authors at info@corporateknights.com.

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## FOREWORD

#### PAUL ABBERLEY: INTERIM CHIEF EXECUTIVE, AVIVA INVESTORS



I strongly welcome this report from Corporate Knights (CK) Capital, which is the third key report in our Sustainable Stock Exchanges (SSE) Initiative.

I was privileged to help launch the first report in this series, which was: *Sustainable Stock Exchanges: Real Obstacles, Real Opportunities.* That 2010 report discussed issues such as the balance between voluntary exchange-led initiatives and regulation as well as the roles of exchanges, investors and regulators. This new report demonstrates that both voluntary exchange-led initiatives and a more command and control approach to regulation do indeed work to promote much greater transparency on key sustainability performance measures by listed companies.

This research has only been possible due to the good offices of CK Capital and participation of Bloomberg, for which I thank them both. Indeed, I think we are only just beginning to understand the potential within the Bloomberg data set, both for investors and for government. For example, the environmental, social and corporate governance (ESG) fields can be used by policy-makers to research, develop and test a much more modern policy framework to correct the many market failures that exist around corporate transparency, integrated valuation and effective investor stewardship. To our knowledge, this is the first time that the Bloomberg data covering thousands of companies has been used to analyze policy performance at the country level, and with a clear policy proposal in mind.

Aviva Investors has been involved with the SSE initiative from its beginning, and we launched our policy proposal back in 2008. At that time, the financial crisis had prompted Alain Dromer - then 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 2011, as a result of its dialogues within the SSE initiative, Aviva Investors convened the Corporate Sustainability Reporting Coalition (CSRC). This coalition now includes over 70 organizations, primarily institutional investors, managing in excess of \$2 trillion. Members of this coalition are **urging all nations at the Rio+20**, **United Nations Conference on Sustainable Development, to commit to develop an international policy framework 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 annual general meeting (AGM). Among the options for national delivery would be changes to company law, a separate statute requiring such disclosure, the development of a voluntary code, and – of course – changes to stock market listing rules.

This report clearly demonstrates that there has already been some very welcome recent progress on this agenda from a number of stock exchanges and their regulators – notably those in Brazil and South Africa. We can also see some strong underlying long-term performance, particularly but not exclusively from Northern Europe.

However, the report also highlights the scale of the problem. Of the roughly 20,000 companies that Bloomberg examined, over three quarters still do not publish even one datapoint on business sustainability performance issues. For our part, we are 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. Markets are driven by information. If the information they receive is short term and thin, then these characteristics will define our markets. It is our concern about the absolute value of the assets that we run on behalf of 43 million clients that has led us to do this work.

To learn more about the SSE initiative, please visit: www.SSE initiative.org To learn more about Aviva Investors' CSRC, please visit: www.aviva.com/earthsummit2012

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#### **ABOUTSUSTAINABLESTOCKEXCHANGES**

Named by Forbes magazine as one of the "world's best sustainability ideas" and a finalist for the 2011 Katerva Sustainability Award, Sustainable Stock Exchanges (SSE) is an initiative aimed at exploring how exchanges can work together with investors, regulators and companies to enhance corporate transparency, and ultimately performance, on environmental, social and corporate governance (ESG) issues and encourage responsible long-term approaches to investment.<sup>1</sup> To learn more about the SSE initiative, please visit: www.SSEinitiative.org.

#### **ABOUTCKCAPITAL**

CK Capital is the investment research and financial products arm of Corporate Knights, Inc. Founded in 2011, CK Capital supplies the market with objective, data-driven "clean capitalism" ratings for a universe of approximately 2,000 companies covering 15 global equity indices. CK Capital's ratings platform measures company performance on a focused suite of key sustainability metrics, ranging from greenhouse gas productivity to employee turnover, pension fund status, and CEO-average worker pay. CK Capital's methodology for evaluating companies' clean capitalism performance was cited as a leading global practice (by SustainAbility in its Rate the Raters research program).

To learn more about CK Capital, please visit: www.corporateknights.com/ck-capital.

#### ABOUTTHISREPORT

This report provides an overview of sustainability disclosure practices on the world's composite stock exchanges. Disclosure rates, growth in disclosure rates and disclosure timeliness for a range of seven "first generation" sustainability indicators are investigated. The paper uses these three measures of sustainability disclosure performance to generate a ranking of the world's composite stock exchanges.

<sup>1</sup> The SSE website: http://www.sseinitiative.org/ Accessed May 14, 2012.

# EXECUTIVESUMMARY

**KEY FINDINGS / RECOMMENDATIONS** 

## EXECUTIVESUMMARY

While relatively commonplace among today's mid, large and mega-cap corporations, the practice of voluntarily reporting sustainability performance data may have reached its zenith. Despite the changing role of the corporation, tightening disclosure regulations and the growing relevance of "sustainability" as an investment thematic, disclosure rates for the seven most broadly disclosed sustainability performance metrics – energy, greenhouse gas (GHG) emissions, water, waste, lost time injury rates, payroll costs and employee turnover rates – are either plateauing or dropping.

While these "first generation" sustainability indicators are still being disclosed by an appreciable number of mid, large and mega-cap companies, we may be witnessing a limit in the proportion of large companies that can be expected to voluntarily report these metrics going forward.

As the onus is on policy-makers to step in and reinvigorate the practice of corporate sustainability reporting, much can be learned from critically examining those geographies that are leading the way in encouraging the uptake of sustainability reporting practices.

In this paper we support this objective by analyzing the general state of sustainability disclosure across the world's composite stock exchanges.

#### **KEY FINDINGS**

- The world's most advanced composite stock exchange from an overall sustainability disclosure perspective is the **Netherlands composite (Euronext Amsterdam)**. The top 10 are rounded out by the composite exchanges based in Denmark, Finland, Spain, South Africa, Sweden, Norway, Italy, Brazil and France.
- Our study provides strong evidence that disclosure policies, including voluntary policies, enacted by regulators, governments or stock exchanges ultimately **lead to actual improvements** in company disclosure practices. All of the top 10 countries in our ranking were found to have some form of sustainability reporting standards in place.
- **Only 52** mid, large and mega-cap companies, with total market capitalization of \$2 trillion, disclosed all seven first generation sustainability indicators in 2010.

RANK	COMPOSITE Stock Exchange	DISCLOSURE Score (Maximum 50)	DISCLOSURE GROWTH SCORE (MAXIMUM 20)	DISCLOSURE TIMELINESS SCORE (MAXIMUM 30)	OVERALL Score (Maximum 100)	SUSTAINABILITY REPORTING STANDARDS
1	NETHERLANDS	35.3	17.6	28.2	81.1	~
2	DENMARK	39.7	11.2	30.0	80.9	<ul> <li>✓</li> </ul>
3	FINLAND	48.5	13.5	15.9	77.9	~
4	SPAIN	44.1	16.5	16.7	77.3	<ul> <li>✓</li> </ul>
5	SOUTH AFRICA	41.2	20.0	14.1	75.3	~
6	SWEDEN	30.9	14.1	27.3	72.3	<ul> <li>✓</li> </ul>
7	NORWAY	29.4	15.9	24.7	70.0	~
8	ITALY	47.1	12.9	8.8	68.8	<ul> <li>✓</li> </ul>
9	BRAZIL	38.2	19.4	9.7	67.3	<ul> <li>✓</li> </ul>
10	FRANCE	45.6	8.8	12.3	66.7	<ul> <li>✓</li> </ul>

#### TOP 10 COMPOSITE STOCK EXCHANGES BY OVERALL SUSTAINABILITY DISCLOSURE

- Disclosure rates for each metric **vary considerably across sectors**, with notable discrepancies on lost time injury rate (LTIR); while 10% of all mid, large and mega-caps disclose LTIR, only 2% of companies in the Financials sector do, compared to 23% of Materials companies.
- Certain countries are excelling in disclosure around certain indicators: **Portugal** has the world's highest disclosure rate of water data (73%), **Italy** has the highest disclosure rate of employee turnover data (42%) and **Denmark** has the highest disclosure rate of LTIR (35%). Remarkably, **Finland** has the world's highest disclosure rate on the remaining four indicators: payroll data (91%), waste (83%), energy (78%) and GHG emissions (52%).
- A weak relationship exists between growth in sustainability disclosure and GDP growth, suggesting that policies designed to improve corporate sustainability disclosure **are not correlated with a decline** in economic performance.
- Companies trading in Denmark are the **world's most timely sustainability reporters**; 57% of all large companies on the Danish composite with a Q4 2011 financial year-end had published 2011 sustainability data by May 1, 2012.
- A great process of "catch up" is taking place on the world's **emerging markets-based stock exchanges**. Four of the five exchanges with the fastest growing sustainability disclosure rates are emerging markets, with **South Africa** and **Brazil** the most notable performers; the disclosure of first generation sustainability indicators by companies trading in South Africa is increasing by 81% per year, and by 51% per year for companies trading in Brazil.
- The disclosure rate for each of the first generation indicators **may be plateauing**, which could be a signal for intervention by policy-makers.

MARKETS HAVE THE POWER TO SOLVE MANY OF OUR AGE'S MOST PRESSING SOCIAL, ECONOMIC AND ENVIRONMENTAL CHALLENGES, BUT INFORMATION IS THEIR OXYGEN.

## DISCLOSURE OF FIRST GENERATION SUSTAINABILITY INDICATORS BY THE WORLD'S MID, LARGE AND MEGA-CAP CORPORATIONS



#### RECOMMENDATIONS

There is tremendous opportunity for policy-makers to define a standardized, first generation set of sustainability indicators and nudge large companies (the majority of whom already collect this information) to integrate these indicators into regular corporate disclosures. Our findings support five core recommendations for national policy-makers:

- Implement a Disclosure Framework. The possibility of plateauing global disclosure rates suggests that intervention by policy-makers is urgently needed. Policy-makers should initially concentrate on developing disclosure policies that target mid, large and mega-cap companies, since a critical mass of these companies are already voluntarily disclosing a broad spectrum of first generation sustainability indicators. Moreover, mid, large and mega-cap companies represent 85% of total global market capitalization and contribute disproportionately to overall global economic activity. Improving the scope of these companies' sustainability reporting practices could yield impactful and relatively immediate gains. The absence of direct policy intervention at this critical juncture in the evolution of corporate sustainability reporting practices.
- *Investigate Best Practices.* Composite stock exchanges that are leading the way in encouraging the voluntary disclosure of specific indicators merit deep investigation by policy-makers, as part of a broader goal of crafting workable, smart policy that reflects existing best practices. The "comply or explain" approach, such as that employed in Brazil, could offer a reasonable balance between uncompromising mandatory rules and malleable or poorly supported voluntary measures. We recommend that this approach be critically reviewed by policy-makers as a delivery mechanism.
- Adopt a Graduated Approach. The vast discrepancy in disclosure rates across sectors suggests that a one-size-fits-all approach may not be practical over the short run, even if it constitutes a desirable long-term objective. A graduated, sector-specific approach that builds off of industry reporting norms and facilitates best practice sharing is likely to be most defensible from an industry engagement perspective.
- *Improve Standardization of Data*. The comparability and actionability of much of the sustainability data currently reported by corporate actors is constrained by the lack of uniform standards. Policy-makers should therefore work towards the development of an industry-specific definitional framework.
- *Shift to Integrated Reporting.* It is recommended that policy-makers work with national securities regulators, local stock exchanges, relevant third-party initiatives and other stakeholders to encourage the uptake of integrated reporting. Since the lag time for companies to disclose annual sustainability data to the market can range from three to 18 months and beyond, a secular shift to integrated reporting could lead to more standardized data delivery and reporting cycles.

In summary, markets have the power to solve many of our age's most pressing social, economic and environmental challenges, but information is their oxygen. The current patchwork approach to sustainability accounting has choked the potential for markets to drive sustainable development. Jim MacNeill, the lead author of the Brundtland Commission's landmark report "Our Common Future," highlights exclusionary accounting as one of the chief reasons why more progress has not been made since the original Rio Earth Summit 20 years ago.

There are two paths to choose from. The path of exclusionary accounting divorced from the social and environmental context which leads to collapse, or the path of integrated accounting, an essential catalyst to spur market-driven solutions for sustainable prosperity.

# "WHAT GETS MEASURED, GETS MANAGED." – PETER DRUCKER

### **METHODOLOGY**

The unit of analysis for this report is a "composite stock exchange". A composite stock exchange is an aggregation of all stock exchanges within a single country. Grouping a country's stock exchanges in this manner allows for cross-country comparisons and aligns with definitional frameworks used by national policy-makers, the target audience of this paper.

In the text that follows, any reference to a country is a reference to that country's composite exchange. For example, when we write "the United States" we are not referring to the United States government but to the United States' composite stock exchange. This abbreviation allows for more fluent dialogue.

There is a close but ultimately imperfect relationship between the constituents of a country's composite stock exchange and the geographic headquarters of those constituents. Most composite stock exchanges are comprised exclusively of same-country companies.

A notable exception is the composite exchange of the United States. While the vast majority of companies trading on the United States composite are also based in the U.S., many non-U.S. companies use U.S.-based exchanges as their primary stock exchange.

All data related to the disclosure of these indicators, as well as market capitalization data, was obtained from Bloomberg. All figures are in U.S. dollars. The end-product of this paper's analysis is a ranking of sustainability disclosure on the world's composite stock exchanges. The ranking is intended to serve as a benchmark that stakeholders can use to determine best practices, identify performance trends and objectively measure improvements in sustainability disclosure practices achieved by composite stock exchanges. While the ranking is driven by a simple, clear and comprehensive methodology, it is not a perfect measure of sustainability disclosure. As outlined in greater detail on page 39, some of the limitations include:

- *Time Frame*. The ranking measures sustainability disclosure during the 2006-2010 period. While this approach allows for complete five-year trend analysis, it may obfuscate important developments that took place during the 2010-2012 time frame. Notably, recent (2012) and highly substantive efforts by the BM&FBOVESPA, the Brazilian stock exchange, to encourage sustainability reporting using a "comply or explain" approach are not captured in our analysis. Since our research suggests this measure is highly likely to yield tangible improvements in sustainability disclosure practices, our methodology likely understates the performance of the Brazilian composite stock exchange, which already sits an impressive 9th in our overall ranking. Similarly, the effects of a recent (2011) and critical sustainability disclosure directive issued by the Securities and Exchange Bureau of India (SEBI) are not captured in this paper's analysis. The relatively poor performance of the Indian composite stock exchange in our ranking (30<sup>th</sup> out of 35) is therefore not indicative of the latest policy developments.
- *First Generation Indicators.* The ranking focuses exclusively on the seven first generation sustainability indicators: energy, greenhouse gas (GHG) emissions, water, waste, lost time injury rates, payroll costs and employee turnover. These seven metrics were used as a yardstick to measure the disclosure practices of composite exchanges because, at the time of writing, they were the most widely-disclosed performance-based sustainability indicators in existence. A consequence of this granular focus is that (successful) efforts by stock exchanges to encourage the reporting of other sustainability metrics may not be fully recognized in our ranking.
- Discrepancies in Size. Composite exchanges with relatively large numbers of mid, large and mega-cap companies (such as the United States, Japan, China and the United Kingdom) are evaluated in the same way as composite exchanges with relatively sparse numbers of large companies (such as Finland, Mexico and Thailand). The effects of a sudden improvement in sustainability disclosure by a small number of companies would be magnified on composite exchanges with relatively few listings. While we address some of these inconsistencies by employing minimum size requirements in our final ranking, our methodology may benefit smaller composite exchanges.
- Sector Composition. The sector composition of each composite exchange is not taken into account in our ranking. Exchanges that are home to a disproportionate share of companies in industries that are known to have excellent disclosure practices – such as Materials companies - may be advantaged in our ranking.
- Composite vs. Individual Stock Exchanges. Finally, our decision to group same-country exchanges under a "composite exchange" heading facilitates cross-country comparisons and speaks to national policy-makers. But it may conflate interesting trends that are occurring within countries at the level of the individual stock exchange.

Despite these limitations, our ranking allows for transparent benchmarking of sustainability disclosure across the world's stock exchanges based on an objective set of criteria.

In future iterations of this benchmarking exercise, which CK Capital expects to conduct annually, second and third generations of sustainability indicators may be used to evaluate disclosure performance. CK Capital expects to develop these suites of indicators based on a full stakeholder consultation process.

It is the hope and intention of CK Capital that this benchmarking effort encourages competition among composite exchanges to drive deep and sustained improvements in the sustainability disclosure practices of their listed companies.

# INTRODUCTION

CHANGING ROLE OF THE CORPORATION CHANGING REGULATORY FRAMEWORK CHANGING ROLE OF INVESTORS

#### **INTRODUCTION**

The majority of large (greater than \$2 billion market capitalization) publicly traded companies are reporting sustainability performance data. Most of these disclosures are being made in stand-alone "voluntary" reports such as corporate sustainability reports or through thirdparty initiatives such as the Carbon Disclosure Project; however, a growing number of corporations are using an integrated reporting format whereby sustainability performance data is embedded in conventional financial disclosures.<sup>2</sup> The rapid uptake of corporate sustainability reporting can be viewed as a response to three broad-based trends that are unfolding at different rates across the global economy.

#### **1. CHANGING ROLE OF THE CORPORATION**

Over the last 30 years, the publicly traded corporation has grown in importance and stature from being a relatively minor part of the global economy to becoming its paramount characterization. In 1980, the market value of all publicly traded companies was one-quarter of global gross domestic product (GDP). Today, while it has come down from its peak at the turn of the century, that ratio still stands at eye level with global GDP – a four-fold increase in importance since 1980.

According to the TEEB for Business Report, the world's top 3,000 listed companies are estimated to produce negative impacts or "environmental externalities" totalling about \$2.2 trillion annually and representing a third of their profits.<sup>3</sup> Any secular shift towards an internalization of these impacts could have a profound impact on the balance sheets of many of the world's largest companies.

Mirroring the corporation's enhanced prominence as a wealth generator and economic actor in our society are rising stakeholder expectations regarding sustainability disclosure. Employees, suppliers and customers are exerting increased pressure on corporations to broaden and improve internal reporting practices. This pressure has intensified in many industries – the Financials sector in particular – as a result of the wave of corporate scandals in the early 2000s. Corporations have seized upon this trend as a means to generate reputational capital with key constituencies, to drive improvements in internal reporting systems and to keep pace with competitors.

<sup>&</sup>lt;sup>2</sup> While most companies that disclose sustainability data continue to use a stand-alone reporting format, a growing number of companies are subscribing to the concept of "integrated reporting". This practice involves disclosing sustainability performance data – including energy use, payroll data and injury rates – alongside conventional financial information in mandatory filings such as a 10-K, Annual Information Form or in the MD&A section of an Annual Report. Sustainability data disclosed through these channels is subject to the same audit committee review procedures as financial data, and thus differs in important ways from sustainability data released only through voluntary reports. <sup>3</sup> Source: http://www.teebweb.org/Portals/25/Documents/TEEBforbusinessch2.pdf

#### 2. CHANGING REGULATORY FRAMEWORK

While corporations are facing bottom-up pressure for improved sustainability disclosure (and performance) from internal stakeholders, many are also simultaneously facing top-down pressure in the form of tightening disclosure regulations. Many national and sub-national securities regulators, such as the U.S. Securities and Exchange Commission (SEC), the Ontario Securities Commission and the Australian Securities and Investment Commission, are influencing and in some cases mandating companies to improve sustainability disclosures.

Coupled with parallel developments at a growing number of stock exchanges,<sup>4</sup> the escalating "monetization" of first generation sustainability indicators such as greenhouse gas emissions,<sup>5</sup> increasing guidance on sustainability disclosure from accounting bodies<sup>6</sup> and the continued success of the Global Reporting Initiative and International Integrated Reporting Council, the boundary that used to delineate voluntary versus mandatory disclosures has been blurred.<sup>7</sup> Indeed, many metrics that used to be provided on a strictly voluntary basis are now considered obligatory disclosures in certain jurisdictions. For example, companies trading in the U.S. today must disclose executive remuneration data under SEC requirements. Other examples include new International Financial Reporting Standards (IFRS) rules that require companies to disclose detailed payroll data.<sup>8</sup> National legislation in many countries now compels companies to disclose air contaminants and toxic chemical releases.<sup>9</sup> The growing prevalence of sustainability disclosures can therefore be viewed as part of a larger process towards increased corporate transparency and accountability.

#### 3. CHANGING ROLE OF INVESTORS

Institutional investors have played a formative role in incentivizing corporations to improve their sustainability disclosure practices. Institutional investors, particularly those based in Europe, are increasingly integrating corporate sustainability information in their valuation and decision-making frameworks. Corporations that cannot – or choose not to – disclose increasingly material datapoints (such as water consumption) may be unable to adequately satisfy increasingly sophisticated requests for sustainability performance data from their most important owners.

This trend has been supported by several watershed developments. The "ESG Factors & Metrics for Investors" manual, issued by the Chartered Financial Analysts (CFA) Institute in 2008, served as a key catalyst in this process. The Sustainability Accounting Standards Board is working to establish and maintain industry-tailored key performance indicators that foster integrated reporting on material sustainability issues by publicly traded companies. Third-party initiatives such as the Carbon Disclosure Project, the United Nations Principles for Responsible Investment and the Sustainable Stock Exchanges initiative have broadly raised the importance of corporate sustainability reporting as a management tool. Bloomberg and Thomson Reuters added social and environmental data feeds to their standard corporate metrics and intelligence platforms in 2010, which further accentuated this trend.

 <sup>&</sup>lt;sup>4</sup> For example, the BM&FBOVESPA in Brazil and the Johannesburg Stock Exchange in South Africa have developed sustainability disclosure requirements for listed companies. For more information, see "Sustainable Stock Exchanges: A Report on Progress", 2012.
 <sup>5</sup> A growing number of policy mechanisms at the supra-national, national and sub-national level of government impose specific disclosure requirements on qualifying corporations.

A growing number of policy mechanisms at the supra-national, national and sub-national level of government impose specific disclosure requirements on qualifying corporations. Representative legislation includes the Danish Financial Statements Act, the Grenelle II Act in France, the Specified Gas Emitters Regulation in Alberta, Canada, the King Code III in South Africa and the European Union Emissions Trading Scheme.

<sup>&</sup>lt;sup>6</sup> Accounting bodies including the International Accounting Standards Board (IASB), Financial Accounting Standards Board (FASB) and Canadian Institute of Chartered Accountants (CICA) are publishing more and broader guidance documents to help companies interpret the concept of "materiality" in the context of sustainability disclosure and accounting conventions.

<sup>&</sup>lt;sup>7</sup> For example, the regulation of greenhouse gases through such initiatives as the European Union Emissions Trading Scheme has led to increased expenses and in some cases windfall profits for companies operating covered installations.

<sup>&</sup>lt;sup>8</sup> The specific provision is IAS 19.

<sup>&</sup>lt;sup>9</sup> Examples include the Toxics Release Inventory in the U.S. and the National Pollutant Release Inventory in Canada.

In summary, the changing role of the corporation, tightening disclosure rules and growing prominence of sustainability as an investment thematic have brought down barriers and facilitated a wider rollout of sustainability disclosure.

The purpose of this paper is to investigate the effects of these trends at the level of the individual corporation. We are primarily interested in measuring the extent to which the world's mid, large and mega-cap corporations are disclosing a first generation set of sustainability indicators, and how these disclosure rates have trended over time.<sup>10</sup> We segment our findings using a country's composite stock exchange.<sup>11</sup>

Our study contributes to the literature on corporate sustainability and reporting practices in several important ways. First, using the most recent and complete data set available, this study provides authoritative analysis on the sustainability disclosure practices of the world's largest corporations. We focus our analysis on mid, large and mega-cap companies because they are responsible for a vastly disproportionate share of global economic activity, and have the greatest means and incentives to engage in sustainability reporting. Moreover, unlike the majority of their micro and small-cap counterparts, they are already disclosing key sustainability metrics in meaningful numbers, and largely on a voluntary basis. A deep understanding of which indicators these companies are disclosing, how practices have trended over time, and how they vary by geography (proxied by composite stock exchanges) can provide much-needed granularity to existing policy-making discussions.

Second, we determine which exchanges are home to the world's "quickest" sustainability reporters. Since the lag time for disclosing annual sustainability data to the market can range from three to 18 months and beyond, this is a critical – and often under-analyzed – aspect of corporate sustainability reporting practices. Since most sustainability reporting in most jurisdictions continues to take place on a voluntary basis, this inquiry can provide insight into the quality of companies' internal data collection systems, the levels of priority placed on sustainability reporting by management, and regional reporting norms.

Third, we introduce a ranking of the world's composite stock exchanges based on a comprehensive assessment of each exchange's overall performance in sustainability disclosure. The ranking provides a useful benchmark for national policy-makers looking to support the development of sustainability disclosure frameworks, and highlights best practices across three performance measures: disclosure rates, growth in disclosure rates and disclosure timeliness.

<sup>&</sup>lt;sup>10</sup> Mega-cap is defined as market capitalization greater than \$200 billion. Large-cap is defined as capitalization over \$10 billion but less than \$200 billion, while mid-cap is between \$2 billion and \$10 billion.

<sup>&</sup>lt;sup>11</sup> As mentioned in the Methodology section, a composite stock exchange refers to a conglomeration of all exchanges based in a single country. For example, the U.S. composite exchange includes the New York Stock Exchange, the NASDAQ and the National Stock Exchange.

# SUSTAINABILITY DISCLOSURE: THE STATE OF PLAY



Before investigating the reporting practices of companies on individual composite stock exchanges, it is instructive to first look at sustainability disclosure from a market capitalization perspective.



SOURCE: BLOOMBERG, CK CAPITAL

The Venn diagram in Figure 1 shows the market capitalization of three different sets of companies. The outermost circle represents the market capitalization of the world's ~50,000 public companies, which stood at \$52 trillion at year-end 2010.<sup>12</sup> The second circle reflects the market capitalization of the world's ~4,000 mid, large and mega-cap companies, which at year-end 2010 totalled \$44 trillion.<sup>13</sup>

By overlaying these two circles, it can be determined that 8% of the world's public companies constituted over 84% of total global market capitalization in 2010. This is a recurring relationship that holds generally constant from year to year. It underscores the disproportionately significant role that mid, large and mega-caps play in overall corporate economic activity.

<sup>12</sup> Source: Bloomberg. The total number of publicly traded companies has increased since year-end 2010. As of June 1, 2012, it was approximately 52,000.

<sup>13</sup> The absolute number of global mid, large and mega-cap companies at year-end 2010 was 4,001.

## FIRSTGENERATION SUSTAINABILITYINDICATORS

The number of sustainability indicators disclosed by companies has increased dramatically in recent years. Bloomberg currently tracks 206 sustainability metrics, up from 72 in 2008. Based on local reporting practices, stakeholder preferences and other factors, companies in different reporting jurisdictions are finding new and innovative ways to quantify their sustainability performance for stakeholders.

However, despite the growing breadth of sustainability metrics offered by corporate reporters, only a small number of quantitative indicators can be said to be broadly disclosed across industry groups, which we define as disclosure rates of 10% or higher.

Analysis undertaken by CK Capital suggests that only seven indicators currently meet this test: energy, GHG emissions, water, waste, lost time injury rate, payroll costs and employee turnover. While the materiality of these "first generation" sustainability indicators varies by industry, there are companies from all industry groups that disclose these metrics.

A brief definition of each indicator, as well as its corresponding code in the Global Reporting Initiative (GRI), is found in Figure 2.

There are many examples of indicators that are material from a financial or policy-making perspective but that remain poorly disclosed by companies. Metrics that seek to gauge a corporation's innovativeness, the satisfaction of its customers or workforce, or the professionalism of its corporate culture are good examples. Over time, as disclosure thresholds improve, these metrics may become part of a "second generation" of sustainability indicators.

FIRST GENERATION Sustainability indicator	MEASUREMENT
ENERGY	Total direct and indirect energy consumption (GRI: EN3 AND EN4) during a single reporting period.
GHG EMISSIONS	Total greenhouse gas emissions in metric tons of CO <sub>2</sub> e (GRI: EN16) during a single reporting period. Using the Greenhouse Gas Protocol, only Scope 1 (direct) and Scope 2 (indirect) emissions are typically included.
WATER	Total water withdrawn (GRI: EN8) during a single reporting period.
WASTE	Total waste produced (GRI: EN22) during a single reporting period.
LOST TIME INJURY RATE (LTIR)	The frequency of lost time injuries relative to the total time worked by the total workforce during a single reporting period. "Lost time" refers to days that could not be worked as a consequence of a worker or workers being unable to perform their usual work because of an occupational accident or disease (GRI: LA7).
PAYROLL COSTS	A company's total wage bill during a single reporting period (GRI: LA3).
EMPLOYEE TURNOVER	The number of employees who leave an organization voluntarily or due to dismissal, retirement or death while in service during a single reporting period (GRI: LA2).

#### FIGURE 2: FIRST GENERATION SUSTAINABILITY INDICATORS

SOURCE: GLOBAL REPORTING INITIATIVE (GRI), CK CAPITAL

The innermost circle in Figure 1 represents the market capitalization of the world's mid, large and mega-caps that disclosed all seven first generation sustainability indicators in 2010. Out of the total universe of 4,001 mid, large and mega-caps, only 52 (1.3%) reported all of these metrics. The market capitalization of these 52 companies totalled \$2 trillion.

Against total global market capitalization of \$52 trillion, this means that only 4% of the world's market capitalization is currently covered by complete first generation sustainability disclosure.

One of the reasons why such a small amount of global market capitalization is covered by complete disclosure of the seven first generation sustainability metrics is that the financial materiality of these indicators varies considerably from industry to industry.

# THE DISCLOSURE OF FIRST GENERATION SUSTAINABILITY INDICATORS BY SECTOR

While relevant to all large corporations, the seven first generation sustainability indicators are not disclosed by a uniform proportion of mid, large and mega-cap companies in all sectors. Indeed, some indicators lend themselves to reporting by companies in certain industries. The following table shows disclosure rates for each sustainability indicator for the world's 4,001 mid, large and mega-cap companies as of 2010.

# FIGURE 3: DISCLOSURE OF FIRST GENERATION SUSTAINABILITY INDICATORS BY SECTOR, 2010

	FIRST GENERATION SUSTAINABILITY INDICATORS									
SECTOR	ENERGY Consumption	GHG Emissions	WATER Consumption	WASTE	LOST TIME Injury Rate	EMPLOYEE Turnover	PAYROLL Costs			
CONSUMER Discretionary	22%	17%	20%	19%	6%	6%	38%			
CONSUMER Staples	30%	23%	27%	25%	11%	8%	36%			
ENERGY	21%	18%	17%	15%	17%	10%	27%			
FINANCIALS	17%	13%	15%	11%	2%	10%	35%			
HEALTH CARE	29%	18%	27%	25%	13%	10%	34%			
INDUSTRIALS	27%	18%	24%	23%	11%	10%	46%			
INFORMATION TECHNOLOGY	25%	20%	22%	22%	5%	8%	29%			
MATERIALS	39%	24%	35%	28%	23%	16%	45%			
TELECOMMUNI- CATION SERVICES	29%	21%	22%	24%	7%	14%	40%			
UTILITIES	31%	29%	35%	30%	18%	20%	45%			

SOURCE: BLOOMBERG, CK CAPITAL

As shown in Figure 3, the disclosure of each indicator varies significantly across sectors. For example, only 2% of all mid, large and mega-cap Financials companies disclosed LTIR in 2010, compared to 23% for Materials firms. While it is true that most investors are unlikely to be swayed in their decision about whether to buy, hold or sell the stock of a particular bank or insurance company based on that company's lost time injury rate, it is important not to confuse disclosure and materiality. For example, the fact that only 18% of all global mid, large and mega-cap Energy companies disclosed their GHG emissions in 2010 should not be taken as evidence that GHG emissions are financially immaterial to all oil & gas firms. Similarly, the fact that only 36% of all mid, large and mega-cap Consumer Staples companies disclosed their payroll data should not indicate that investors consider this information unimportant, or that they would not benefit from increased transparency surrounding payroll costs.

Rather, the divergence in disclosure rates across sectors reflects the absence of a coordinated global reporting framework for first generation sustainability disclosure, and the parlous state of sustainability disclosure more generally.

In the pages that follow, we measure the disclosure performance of the world's composite stock exchanges based on the proportion of their listed companies (mid-cap and higher) that disclose these first generation indicators. These metrics are increasingly being recognized as indispensable disclosures for best-in-class sustainability reporters.

Our explicit intention is to provide quantitative support for policy-makers seeking to stimulate sustainability disclosure practices among the world's mid, large and mega-cap companies.

We focus our analysis on a specific segment of companies (mid-cap and higher) and a workable number of indicators (the seven first generation metrics) because policy-makers concerned with stimulating broad improvements in the scope of corporate sustainability reporting are often confronted with problems of scope and ambiguities about where to start. Our research is meant to help policy-makers overcome this paralysis by showing that a) mid, large and mega-cap companies differ fundamentally from small and micro-cap companies; b) these companies are already disclosing – largely on a voluntary basis – first generation indicators in appreciable proportions; and c) disclosure is growing most quickly in emerging markets, suggesting that improved corporate disclosure practices are not inconsistent with rapid economic expansion.

# SUSTAINABILITY DISCLOSURE: COMPOSITE STOCK EXCHANGES

## SUSTAINABILITY DISCLOSURE: COMPOSITE STOCK EXCHANGES

In this section we examine the sustainability reporting practices of companies that trade on the world's composite stock exchanges. In the first section, we look at the proportion of companies on each exchange that disclose each of the seven first generation sustainability indicators, and how these disclosure rates have trended over time. In the second section, we review the timeliness of sustainability disclosure, a measure that captures how quickly companies come to market with sustainability data. In the third and final section, we offer a ranking of the world's composite stock exchanges based on overall sustainability disclosure performance.

#### DISCLOSURE OF FIRST GENERATION SUSTAINABILITY INDICATORS

Measuring the disclosure practices of a set of uniformly sized companies (mid, large and mega-caps) on a composite stock exchange-specific basis is a valuable exercise for policy-makers, as it can unearth the impacts of successful policies that could potentially be replicated.

A company's disclosure practices can be meaningfully influenced by the location of its primary stock exchange. Stock exchanges can impose listing requirements on listed companies that include specific sustainability disclosure mandates. Companies on any given exchange are also exposed to disclosure policies that flow from the local securities regulator. Moreover, given the tight relationship between a company's geographical headquarters and its primary stock exchange, companies on any given exchange may also be exposed to disclosure rules stemming from local legislation at the national or subnational level.

Figure 4 shows global disclosure rates for each of the seven first generation sustainability indicators, each year from 2006-2010. The data show reasonably robust levels of disclosure have been achieved by the world's mid, large and mega-cap companies on each of these indicators. For example, over 37% of all mid, large and mega-caps disclosed payroll costs in 2010, over 25% reported energy data and over 22% reported water use. Most of these disclosures are being provided by companies on a voluntary basis although, as mentioned earlier, sustainability disclosure regulations in some jurisdictions are tightening.



#### FIGURE 4: FIRST GENERATION SUSTAINABILITY DISCLOSURE BY YEAR, 2006-2010

SOURCE: BLOOMBERG

It is clear that disclosure levels on all seven indicators are down from 2008 peaks but it is deceptively challenging to identify the drivers of this trend. For example, without exception, the *absolute* number of mid, large and mega-caps disclosing each indicator *increased* (often substantially) from 2008-2010. The decline is thus a reflection of the fact that the denominator (the total number of mid, large and mega-caps) has grown more quickly in recent years than the number of first generation sustainability reporters.

This in turn is the result of the spike in corporate valuations that followed the financial crisis of 2008, which pushed some small-caps to pass the \$2 billion threshold that separates the small and mid-cap categories. However, the decline in disclosure rates observed from 2008-2010 also indicate that most newly formed mid, large and mega-caps are not immediately adopting first generation sustainability disclosure practices.

It is therefore possible that we are witnessing a plateauing in the proportion of mid, large and mega-caps that are (voluntarily) disclosing first generation sustainability data. While more research is needed to confirm the long-term nature of this trend, any slowdown in the uptake of sustainability reporting practices, particularly relating to the first generation set of seven indicators, should represent a grave concern for investors and stake-holders, since this would restrict their ability to determine company-specific exposure to sustainability-driven economic trends, such as rising energy costs. However, a slowdown in sustainability disclosure could represent an opportunity for policy-makers. If it could be demonstrated that a natural "ceiling" exists in the proportion of global mid, large and mega-caps that can be expected to voluntarily disclose sustainability performance data, it stands to reason that the resulting disclosure gap can only be closed through policy, and smart policy in particular.

#### FIGURE 5: TOP PERFORMING COMPOSITE STOCK EXCHANGES BY FIRST GENERATION INDICATOR, 2010

	PAYROLL	ENERGY	WATER	WASTE	GHG	EMPLOYEE Turnover	LTIR
COMPOSITE EXCHANGE WITH HIGHEST DISCLOSURE RATE, 2010	FINLAND	FINLAND	PORTUGAL	FINLAND	FINLAND	ITALY	DENMARK
COMPOSITE EXCHANGE WITH FASTEST GROWING DISCLOSURE RATE, 2006-2010	CHILE	CHINA	SOUTH Africa	SOUTH Africa	SOUTH Africa	SOUTH Africa	SOUTH Africa

SOURCE: BLOOMBERG

As shown in Figure 5, different countries are leading the way in first generation sustainability disclosure, which may reflect regional reporting norms. The figure highlights the exchanges with the highest disclosure rates<sup>14</sup>, and the exchanges with the fastest growing disclosure rates, for each first generation indicator.

The composite exchange in Finland stands out as a unique performer insofar as current disclosure rates are concerned. This exchange has the highest disclosure rate of any global composite exchange on four of the seven first generation sustainability indicators. While the Finnish composite exchange has fewer large company listings than most composite exchanges – 23 large companies in 2010 compared to a global average of 70 – the exchange's strikingly high disclosure rates are likely the result of successful disclosure policies.

Looking at growth in disclosure rates, Figure 5 shows that the South African composite exchange is rapidly becoming the world's top performing exchange in terms of first generation sustainability disclosure. This transition is likely being driven in large part by the implementation of South Africa's King Code III Act.

We investigated the relationship between first generation sustainability reporting growth and GDP growth to see if the composite exchanges with the fastest growing sustainability disclosure rates were based in countries with rapidly expanding economies. Figure 6 shows the 10 composite exchanges with the fastest growing first generation sustainability disclosure rates (measured by compound annual growth rate, or CAGR) and the average annual GDP growth (2006-2010) of their home countries.

We found a generally loose relationship between these two variables, suggesting that improvements in companies' reporting practices are not correlated with overall economic growth. The average annual growth in GDP of the top 10 countries from 2006-2010 was 3.8% compared to average global GDP growth of 2.3%. Four of the top 10 composite exchanges were based in countries with below-average GDP growth: Netherlands, Mexico, Spain and Norway. The data also show that large companies trading on the Chinese composite exchange are improving their first generation sustainability practices at a rate that is not commensurate with China's GDP growth.

<sup>&</sup>lt;sup>14</sup> Disclosure rate refers to the number of mid, large and mega-cap companies on a given exchange that disclose a given indicator as a percentage of the total number of mid, large and mega-cap companies on that exchange.



COMPARISON OF GROWTH IN FIRST GENERATION SUSTAINABILITY REPORTING AND GDP GROWTH, 2006-2010



SOURCE: BLOOMBERG, WORLD BANK

Looking more closely at each indicator, we find vast differences exist in the proportion of large companies across countries that engage in first generation sustainability reporting.

#### PAYROLL

Payroll costs are the most widely disclosed first generation indicator, with 37% of all large companies disclosing this metric in 2010, down from 41% in 2006 and 43% in 2008. Disclosure rates on individual composite stock exchanges in 2010 ranged from 91% in Finland to 0% in Mexico and Peru. The exchanges with the five highest disclosure rates are shown in Figure 7.



FIGURE 7: TOP 5 COMPOSITE STOCK EXCHANGES BY PAYROLL DISCLOSURE, 2010

Figure 8 shows the composite stock exchanges with the five highest growth rates in payroll disclosure. The Chilean composite exchange leads the way, with the proportion of mid, large and mega-caps that disclose payroll costs increasing from 4% in 2006 to 16% in 2010, for a compound annual growth rate (CAGR) of 44%.

FIGURE 8: TOP 5 COMPOSITE STOCK EXCHANGES BY GROWTH IN PAYROLL DISCLOSURE, 2006-2010



#### ENERGY

Energy is the second most widely disclosed first generation indicator, with 25% of all mid, large and megacap companies disclosing this metric in 2010, up from 16% in 2006 but down from 31% in 2008. Disclosure rates on individual composite stock exchanges in 2010 ranged from 78% in Finland to 3% in Turkey. The exchanges with the five highest disclosure rates are shown in Figure 9.

FIGURE 9: TOP 5 COMPOSITE STOCK EXCHANGES BY ENERGY DISCLOSURE, 2010



Figure 10 shows the composite stock exchanges with the five highest growth rates in energy disclosure. The Chinese composite exchange leads the way, with the proportion of mid, large and mega-caps that disclose energy data increasing from 0% in 2006 to 7% in 2010.

FIGURE 10: TOP 5 COMPOSITE STOCK EXCHANGES BY GROWTH IN ENERGY DISCLOSURE, 2006-2010



#### WATER

Water is the third most widely disclosed first generation indicator, with 23% of all mid, large and mega-cap companies disclosing this metric in 2010, up from 15% in 2006 but down from 30% in 2008. Disclosure rates on individual composite stock exchanges in 2010 ranged from 73% in Portugal to 0% in Peru, Poland, Qatar and Kuwait. The exchanges with the five highest disclosure rates are shown in Figure 11.

TOP 5 COMPOSITE STOCK EXCHANGES BY WATER DISCLOSURE, 2010

FIGURE 11:



SOURCE: BLOOMBERG

Figure 12 shows the composite stock exchanges with the five highest growth rates in water disclosure. The South African composite exchange leads the way, with the proportion of mid, large and mega-caps that disclose water data increasing from 3% in 2006 to 53% in 2010, for a compound annual growth rate of 114%.

FIGURE 12: TOP 5 COMPOSITE STOCK EXCHANGES BY GROWTH IN WATER DISCLOSURE, 2006-2010



WASTE

Waste is the fourth most widely disclosed first generation indicator, with 20% of all mid, large and mega-cap companies disclosing this metric in 2010, up from 14% in 2006 but down from 26% in 2008. Disclosure rates on individual composite stock exchanges in 2010 ranged from 83% in Finland to 0% in Indonesia, Peru, Poland, Qatar, United Arab Emirates and Kuwait. The exchanges with the five highest disclosure rates are shown in Figure 13.



FIGURE 13: TOP 5 COMPOSITE STOCK EXCHANGES BY WASTE DISCLOSURE, 2010

SOURCE: BLOOMBERG

Figure 14 shows the composite stock exchanges with the five highest growth rates in waste disclosure. The South African composite exchange leads the way, with the proportion of mid, large and mega-caps that disclose waste data increasing from 3% in 2006 to 19% in 2010, for a compound annual growth rate of 65%.



FIGURE 14: TOP 5 COMPOSITE STOCK EXCHANGES BY GROWTH IN WASTE DISCLOSURE, 2006-2010

#### **GHG EMISSIONS**

GHG emissions is the fifth most widely disclosed first generation indicator, with 18% of all mid, large and mega-cap companies disclosing this metric in 2010, up from 12% in 2006 but down from 28% in 2008. Disclosure rates on individual composite stock exchanges in 2010 ranged from 52% in Finland to 0% in Indonesia, Peru, Poland, Qatar and Kuwait. The exchanges with the five highest disclosure rates are shown in Figure 15.



FIGURE 15: TOP 5 COMPOSITE STOCK EXCHANGES BY GHG EMISSIONS DISCLOSURE, 2010

SOURCE: BLOOMBERG

Figure 16 shows the composite stock exchanges with the five highest growth rates in GHG emissions disclosure. The South African composite exchange leads the way, with the proportion of mid, large and mega-caps that disclose GHG emissions data increasing from 3% in 2006 to 50% in 2010, for a compound annual growth rate of 110%.

FIGURE 16: TOP 5 COMPOSITE STOCK EXCHANGES BY GROWTH IN GHG EMISSIONS DISCLOSURE, 2006-2010



**EMPLOYEE TURNOVER** 

Employee turnover is the sixth most widely disclosed first generation indicator, with 10% of all mid, large and mega-cap companies disclosing this metric in 2010, up from 4% in 2006 but down from 13% in 2008. Disclosure rates on individual composite stock exchanges in 2010 ranged from 42% in Finland to 0% in Indonesia, Thailand, Israel, Peru, Poland, Qatar and Kuwait. The exchanges with the five highest disclosure rates are shown in Figure 17.



FIGURE 17: TOP 5 COMPOSITE STOCK EXCHANGES BY EMPLOYEE TURNOVER DISCLOSURE, 2010

Figure 18 shows the composite stock exchanges with the five highest growth rates in employee turnover disclosure. The South African composite exchange leads the way, with the proportion of mid, large and megacaps that disclose GHG emissions data increasing from 3% in 2006 to 26% in 2010, for a compound annual

growth rate of 78%.



FIGURE 18: TOP 5 COMPOSITE STOCK EXCHANGES BY GROWTH IN EMPLOYEE TURNOVER DISCLOSURE, 2006-2010

LOST TIME INJURY RATE (LTIR)

Lost time injury rate is the least widely disclosed first generation indicator, with 10% of all mid, large and mega-cap companies disclosing this metric in 2010, up from 5% in 2006 but down from 12% in 2008. Disclosure rates on individual composite stock exchanges in 2010 ranged from 35% in Finland to 0% in Russia, Chile, Indonesia, Turkey, Israel, Peru, Poland, Qatar, United Arab Emirates and Kuwait. The exchanges with the five highest disclosure rates are shown in Figure 19.



FIGURE 19: TOP 5 COMPOSITE STOCK EXCHANGES BY LTIR DISCLOSURE, 2010

SOURCE: BLOOMBERG

Figure 20 shows the composite stock exchanges with the five highest growth rates in LTIR disclosure. The South African composite exchange leads the way, with the proportion of mid, large and mega-caps that disclose GHG emissions data increasing from 3% in 2006 to 31% in 2010, for a compound annual growth rate of 86%.



FIGURE 20: TOP 5 COMPOSITE STOCK EXCHANGES BY GROWTH IN LTIR DISCLOSURE, 2006-2010

#### TIMELINESS OF SUSTAINABILITY DISCLOSURE

Timeliness of sustainability disclosure is an important consideration as it impacts the relevance and usefulness of the data for various stakeholders, including investors and other decision-makers. The majority of mid, large and mega-cap companies that publish sustainability data use a stand-alone reporting model. Under this approach, reports can sometimes be issued on a one-year delayed basis.<sup>15</sup> Integrated reporting is a vastly superior communications format because it allows for quicker and more complete analysis of a company's sustainability performance.

In order to measure the speed of sustainability reporting among the world's publicly traded companies, we considered all companies that had a market capitalization of at least \$2 billion as at December 31, 2011 and that had issued first generation sustainability data in any one of the previous five years. We measured the proportion of those companies with a Q4 2011 financial year-end (October 1, 2011 to December 31, 2011) that had released 2011 sustainability data as of May 1, 2012. We limited the analysis to exchanges with a minimum of 10 companies with a Q4 2011 year-end. The results are shown in Figure 21.



#### FIGURE 21: TIMELINESS OF SUSTAINABILITY DISCLOSURES

PERCENTAGE OF COMPANIES WITH Q4 2011 YEAR-END THAT HAD RELEASED 2011 SUSTAINABILITY PERFORMANCE DATA BY MAY 1, 2012

SOURCE: BLOOMBERG

<sup>15</sup> For example, some companies that publish sustainability data had not (as of May 1, 2012) released their 2010 sustainability data.

Our analysis indicates that companies trading in Denmark are, on average, the world's fastest sustainability disclosers; 57% of all large companies on the Danish composite exchange with a Q4 2011 financial year-end had published 2011 sustainability data by May 1, 2012. The top five were rounded out by Australia (56%), the Netherlands (48%), Sweden (45%) and Singapore (43%).

Companies trading on composite stock exchanges based in Europe and Southeast Asia are quickest to market with sustainability data.

The short disclosure response times on exchanges based in Hong Kong and Singapore may be a result of the high degree of efficiency and transparency that characterize these large financial centers.

The case of China, with 24% of its companies with a Q4 2011 financial year-end having published 2011 sustainability data by May 1, 2012, is interesting in the sense that companies trading on Chinabased exchanges such as the Shanghai Stock Exchange do not usually make the top headlines in terms of sustainability disclosure and performance. However, the strong supervisory presence of the central government and the predominance of state-owned companies on such exchanges may play a role in fast turnaround times for sustainability disclosure.

Equally interesting, as shown earlier, companies on the Brazilian, South African, French and Italian composite exchanges performed quite favorably in disclosure rates. However, on average, they are among the world's slowest sustainability disclosers. For example, only 6% of all companies on the Brazilian composite exchange with a Q4 2011 year-end had disclosed their 2011 sustainability reports by May 1, 2012.

# RANKING SUSTAINABILITY DISCLOSURE ON THE WORLD'S COMPOSITE STOCK EXCHANGES

## RANKING SUSTAINABILITY DISCLOSURE ON THE WORLD'S COMPOSITE STOCK EXCHANGES

In this chapter we present our ranking of the world's stock exchanges based on overall sustainability disclosure practices. The ranking can be used by policy-makers as a proxy for the extent to which the world's largest stock exchanges are incentivizing the uptake of sustainability disclosure practices.<sup>16</sup>

Consistent with the main body of this report, the ranking uses three inputs: a disclosure score, a disclosure growth score and a disclosure timeliness score.

*Disclosure score (out of 50).* The disclosure score ranges from 0-50. The first step in determining the score involved looking at the average number of first generation sustainability indicators disclosed by large companies trading on each composite exchange in 2010.<sup>17</sup> In the second step, this 'raw' score was then percent ranked.<sup>18</sup> In the third and final step, each composite exchange's percent rank was multiplied by 50. This represents the final disclosure score. This final step is taken so that the disclosure score is effectively over-weighted relative to the other two scores.

*Disclosure growth score (out of 20).* The disclosure growth score ranges from 0-20. The first step in determining the score involved looking at the compound annual growth rate over the 2006-2010 period for disclosure by large companies on each exchange of each of the first generation sustainability metrics. Given the 2006-2010 time frame, the effects of disclosure policies enacted by individual stock exchanges, securities regulators or by other levels of government after 2010 will not be captured in the disclosure policies in the 2010-2012 period.<sup>19</sup> In the second step, this raw score was then percent ranked. In the third and final step, each composite exchange's percent rank was multiplied by 20. This represents the final disclosure growth score. This step effectively under-weights the importance of the disclosure growth score in terms of its contribution to the overall score.

*Disclosure timeliness score (out of 30).* The disclosure timeliness score ranges from 0-30. The first step in determining the score involves looking at the percentage of large companies on each exchange with a Q4 2011 financial year-end that had published 2011 sustainability data by May 1, 2012. In the second step, this raw score was then percent ranked. In the third and final step, each composite exchange's percent rank was multiplied by 30. This represents the final disclosure timeliness score. This step effectively equal-weights the importance of the disclosure growth score in terms of its contribution to the overall score.

<sup>&</sup>lt;sup>16</sup> In order to be eligible for consideration in the final ranking, a composite exchange had to have a minimum of 10 mid, large or mega-cap companies trading as at year-end 2010, and a minimum of five mid, large or mega-cap companies that disclosed at least one of the seven first generation sustainability indicators. This test was employed because disclosure performance can be skewed on exchanges with a small number of listings.

<sup>&</sup>lt;sup>17</sup> For example, each of the 23 mid, large and mega-cap companies that traded on the Philippines composite stock exchange in 2010 disclosed, on average, 4.8 out of the 7 first generation sustainability indicators.

<sup>&</sup>lt;sup>18</sup> Percent ranking is a common statistical technique that converts a value in a data set into a percentage based on each value's relationship to the total data set. To illustrate, the Philippines composite exchange had the highest "raw" disclosure score, at 4.8 out of a possible 7. It therefore received a percent rank of 100%. The Peruvian composite exchange, by contrast, had the lowest 'raw' disclosure score at 0. It therefore received a percent rank of 0%. The full scoring tables are reproduced in Appendix C.

<sup>&</sup>lt;sup>19</sup> For example, the recent measures by Brazil and India are not captured in our ranking. Our analysis suggests that these measures are highly likely to lead to positive outcomes. In January 2012, BM&FBOVESPA announced that it will recommend that its listed companies either state that they publish a regular sustainability report and where it can be accessed, or explain why they do not do so. 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. Source: Sustainable Stock Exchanges, 2012.

The overall score, shown in the fourth column of Figure 22, ranges from 0-100 and is a sum of the final disclosure score, the final disclosure growth score and the final disclosure timeliness score. The overall score is therefore a rough proxy for the extent to which large companies trading in a given country disclosed the seven first generation sustainability indicators at a given point in time (2010), the extent to which these companies' disclosure practices improved over a five-year time horizon (2006-2010), and the timeliness of these companies' sustainability disclosures. The overall score is *not* a measure of the amount of sustainability information available from companies trading in a given country. For example, an overall score of 90% is not meant to suggest that companies trading on that exchange disclose 90% of the total amount of sustainability performance data possible. Indeed, even among composite exchanges that perform favorably in our ranking, considerable data gaps could still exist.

A fifth column, titled "sustainability reporting standards," signifies whether some form of national sustainability disclosure policy exists in each composite exchange's home country.<sup>20</sup>

By relying on three generally distinct performance measures, our ranking aims to provide a simple, clear yet comprehensive assessment of each exchange's sustainability disclosure performance. We recognize that it is not a perfect measure of performance and that room for improvement exists in the methodology, particularly as more data becomes available. One imperfection in our approach is that the sector composition of each exchange is not taken into account. Exchanges that are home to a disproportionate share of companies in industries that are known to have excellent disclosure practices could unfairly benefit in our ranking. Our approach is also based on a relatively narrow slice of time (2006-2010). As sustainability data is tracked over longer periods, new patterns may emerge in the data that alter the way we think about our disclosure growth score, for example.

Another challenge relates to discrepancies in size among the world's composite exchanges. Composite exchanges with relatively large numbers of mid, large and mega-cap companies (such as the United States, Japan, China and the United Kingdom) are evaluated in the same way as composite exchanges with relatively sparse numbers of large companies (such as Finland, Mexico and Thailand). While we address some of these inconsistencies by employing minimum size requirements for eligibility in our ranking, our methodology may benefit smaller composite exchanges.

It should be stressed that our ranking is constrained to the seven first generation indicators that constitute the analytical thrust of the overall report. For reference, these indicators were selected because they are the most widely disclosed performance-based sustainability metrics. But we recognized they are not the *only* metrics being reported. Exchanges with good disclosure on indicators outside our model will not be recognized.

Finally, our decision to group same-country exchanges under a "composite exchange" heading facilitates crosscountry comparisons and speaks to national policy-makers. But it may obfuscate trends within countries at the level of the individual stock exchange.

Despite these challenges, our ranking provides a clear and workable proxy for overall sustainability disclosure. It shows policy-makers which exchanges are home to the world's most complete reporters insofar as the first generation set of sustainability indicators is concerned. It identifies those exchanges with the fastest growing sustainability disclosure practices. It also shows which exchanges count among their listing the world's most timely sustainability reporters.

By cross-referencing the results of our ranking with each country's existing disclosure mechanisms, policy-makers can also gain valuable insight into which types of policies are most successful in driving results.

The ranking is presented in Figure 22. The complete ranking data tables are found in Appendix C.

<sup>20</sup> Source: Carrots and Sticks - Promoting Transparency and Sustainability, KPMG, 2010.

#### FIGURE 22: A RANKING OF THE WORLD'S COMPOSITE STOCK EXCHANGES BY OVERALL SUSTAINABILITY DISCLOSURE

RANK	COMPOSITE Stock Exchange	DISCLOSURE SCORE (MAXIMUM 50)	DISCLOSURE Growth Score (Maximum 20)	DISCLOSURE TIMELINESS SCORE (MAXIMUM 30)	OVERALL Score (Maximum 100)	SUSTAINABILITY REPORTING STANDARDS
1	NETHERLANDS	35.3	17.6	28.2	81.1	~
2	DENMARK	39.7	11.2	30.0	80.9	<b>v</b>
3	FINLAND	48.5	13.5	15.9	77.9	<b>v</b>
4	SPAIN	44.1	16.5	16.7	77.3	<b>v</b>
5	SOUTH AFRICA	41.2	20.0	14.1	75.3	<b>v</b>
6	SWEDEN	30.9	14.1	27.3	72.3	<b>v</b>
7	NORWAY	29.4	15.9	24.7	70.0	<b>v</b>
8	ITALY	47.1	12.9	8.8	68.8	<b>v</b>
9	BRAZIL	38.2	19.4	9.7	67.3	<b>v</b>
10	FRANCE	45.6	8.8	12.3	66.7	<b>v</b>
11	AUSTRALIA	23.5	4.7	29.1	57.3	<b>v</b>
12	UNITED KINGDOM	32.4	3.5	21.2	57.0	<b>v</b>
13	GERMANY	33.8	5.3	17.6	56.7	~
14	JAPAN	27.9	4.1	23.8	55.8	<b>v</b>
15	SWITZERLAND	26.5	6.5	22.1	55.0	~

	COMPOSITE STOCK	DISCLOSURE SCORE	DISCLOSURE GROWTH SC <u>ORE</u>	DISCLOSURE TIMELINESS SCORE	OVERALL Score	SUSTAINABILITY REPORTING
RANK	EXCHANGE	(MAXIMUM 50)	(MAXIMUM 20)	(MAXIMUM 30)	(MAXIMUM 100)	STANDARDS
16	PORTUGAL	42.6	12.3	0.0	54.9	v
17	SINGAPORE	10.3	18.2	26.5	54.9	
18	HONG KONG	11.8	14.7	25.6	52.0	
19	BELGIUM	25.0	11.8	14.1	50.9	<ul> <li></li> </ul>
20	PHILIPPINES	50.0	0.6	0.0	50.6	
21	CHILE	36.8	9.4	0.0	46.2	~
22	CHINA	5.9	18.8	19.4	44.1	<b>v</b>
23	MALAYSIA	8.8	10.6	22.9	42.3	~
24	AUSTRIA	20.6	8.2	13.2	42.0	<b>v</b>
25	MEXICO	13.2	17.0	11.5	41.7	V
26	RUSSIA	22.1	15.3	0.0	37.3	
27	SOUTH KOREA	17.6	7.6	10.6	35.8	~
28	CANADA	4.4	10.0	20.3	34.7	<b>v</b>
29	UNITED STATES	1.5	7.0	18.5	27.0	V
30	INDIA	14.7	5.9	0.0	20.6	<b>v</b>
31	THAILAND	19.1	0.0	0.0	19.1	
32	TURKEY	16.2	2.9	0.0	19.1	
33	ISRAEL	7.4	1.2	0.0	8.5	
34	POLAND	2.9	2.3	0.0	5.2	
35	PERU	0.0	1.8	0.0	1.8	

According to our analysis, the Netherlands' composite stock exchange (comprised of the Euronext Amsterdam) is the world's top performing exchange in terms of overall sustainability disclosure. The exchange performs well on all three measures of performance, placing 11th in the disclosure score, 5th in the disclosure growth score and 3rd in the disclosure timeliness score.

The superior performance of the Dutch composite exchange can be attributed in part to national legislation that encourages sustainability reporting for certain classes of companies. The Netherlands has adopted the EU Modernization Directive (2003/51/EC) into the Dutch Civil Code, 1838. It requires all listed companies irrespective of size and all large non-listed companies to report financial and non-financial information about the environment, employees and risks in their annual report.<sup>21</sup>

Our research also reveals which countries are performing best on each measure of performance. Somewhat surprisingly, we find the Philippines composite to be the world's most advanced exchange in terms of a strict disclosure score, with a score of 20/20. This score is driven by the observation that large companies on the Philippines composite disclosed, on average, 4.8 of the seven first generation indicators in 2010 – tops of any exchange in the world. This is a highly intriguing finding considering the Philippines is one of the few countries in our list of 35 that was not singled out in KPMG's widely referenced "Carrots and Sticks" report as having some form of voluntary or mandatory sustainability disclosure policies in place. However, further research shows that several disclosure performance.<sup>22</sup> A survey by the International Finance Corporation (IFC) and the World Resources Institute conducted in six countries including the Philippines concluded that sustainability reporting in those countries increased in the 2004-2009 period due mainly to the efforts of national governments, training and consulting organizations, national securities regulators, and professional accounting associations.<sup>23</sup>

In terms of the disclosure growth score, our analysis shows that South Africa is far and away the country with the fastest growth rate in disclosure of the first generation set of indicators. Remarkably, disclosure rates for the first generation indicators are growing at an average of 81% per year among large companies. The top 3 are rounded out by Brazil and China. At the bottom end, growth in sustainability disclosure is essentially flat in Thailand, the Philippines, Israel, Peru and Poland. It is likely not a coincidence that four of these five countries were found to have no national sustainability disclosure policies in place in the "Carrots and Sticks" report.

Finally, looking at the disclosure timeliness score, Denmark has top billing with a score of 10/10. Fully 57% of all mid, large and mega-cap companies trading in Denmark with a Q4 2011 year-end had published their annual 2011 sustainability performance data by May 1, 2012, an extremely quick turnaround by global standards.

Overall, our study provides strong evidence that disclosure policies, including voluntary policies, enacted by regulators, governments or stock exchanges ultimately lead to actual improvements in company disclosure practices. Each of the top 10 countries and, overall, 26 of the 35 countries in our ranking have some form of national disclosure policies in place.

<sup>&</sup>lt;sup>21</sup> Carrots and Sticks – Promoting Transparency and Sustainability, KPMG, 2010. Page 57.

<sup>&</sup>lt;sup>22</sup> For example, the Philippine Securities and Exchange Commission (PSEC) requires public companies to make a statement regarding their compliance with environmental laws and regulations in their reporting. The Philippine Institute of Certified Public Accountants (PICPA) has established a special committee on "Sustainability Reporting and Assurance" which offers training in "triple bottom line" reporting and promotes the GRI. The Management Association of the Philippines recognizes "the best annual report" each year – the one that displays transparency in reporting both financial and non-financial metrics. Source: IFC and World Resources Institute, 2009.

<sup>&</sup>lt;sup>23</sup> Carrots and Sticks - Promoting Transparency and Sustainability, KPMG, 2010. Page 10.

# CONCLUSION

#### CONCLUSION

In this paper we have sought to identify those global composite stock exchanges that are leading the way in the disclosure of the seven first generation sustainability metrics.

We found that while the majority of the world's largest companies by market capitalization are disclosing sustainability data, the utility of this information is constrained by a lack of completeness, standardization and timeliness. We also found that disclosure rates for all seven indicators may be plateauing, although it is too early to draw any firm conclusions.

In terms of current disclosure rates across countries, we found Finland to be a stand-out performer; the country has the highest disclosure rate on four of the seven first generation indicators, including 91% in payroll, 83% in waste, 78% in energy and 52% in GHG emissions. Surprisingly, the Philippines was also found to be a top global performer in terms of current disclosure.

Looking at growth in sustainability disclosure, we found South Africa to be in a league of its own, with the proportion of listed mid, large and mega-caps that disclose first generation sustainability data growing at an average rate of 81%.

Our analysis into the timeliness of sustainability disclosure found that the world's "quickest" reporters are based in Denmark.

Using a blend of disclosure, disclosure growth and disclosure timeliness, our overall ranking found the Netherlands in top position, followed by Denmark, Finland, Spain and South Africa.

The first key finding from our investigation is that a very small proportion of the world's mid, large and megacap companies are currently disclosing all seven first generation indicators. Only 52 companies, representing \$2 trillion in market capitalization, engaged in "complete" first generation disclosure in 2010. This compares to an overall total of 4,001 mid, large and mega-cap companies with a market capitalization of \$44 trillion. Examining companies through this lens sets a high disclosure bar and it should be stressed that a far greater number of companies are disclosing one, two or even three first generation indicators.

The second finding is that the uptake of first generation sustainability reporting by the world's mid, large and mega-cap companies is substantial but possibly slowing. While more longitudinal research is needed to verify this trend, we could be at a tipping point in the state of voluntary sustainability disclosure that could warrant intervention by policy-makers.

The third key finding is that certain countries are excelling in the disclosure of certain indicators, which could point to successful policies that could be replicated. For example, Portugal is the country with the world's highest disclosure rate of water consumption (73%), Italy has the highest disclosure rate of employee turnover data (42%) and the disclosure of payroll data is growing most quickly in Chile (at 44% per year). More research is needed to uncover the drivers of these leading performances.

This paper's findings should be viewed as one step in a continuum of improved corporate disclosure practices. Next steps on the continuum include standardization of first generation sustainability data, perhaps using a "comply or explain" regulatory approach; the percolation of sustainability disclosure to smaller cap companies; and increased emphasis on driving improvements in companies' sustainability performance rather than sustainability disclosure.

# **APPENDICES**

#### **APPENDIX A:**

DISCLOSURE COMPARABILITY

#### APPENDIX B:

COMPLETE DATA TABLES FOR FIRST GENERATION SUSTAINABILITY INDICATORS

#### **APPENDIX C:**

RANKING DATA TABLES

## APPENDIX A: DISCLOSURE COMPARABILITY

The previous sections found that sustainability disclosure practices are erratic globally. The lack of consistency in the scope and methodology used in reporting sustainability datapoints represents another dimension to the issue of sustainability disclosure. This problem is omnipresent with energy consumption, GHG emissions, water consumption, waste generation and employee safety disclosures. For example, sharp differences can be found between the normalized energy consumption of two energy utilities of comparable size for the same time period. Such discrepancies can result from differences in performance, which in turn can be driven by differences in local energy prices or the strategic awareness of energy management. However, they may also point to differing definitions of "energy consumption". This may be because of differences in reporting boundaries; some entities may report energy data for all of their global operations, while others may choose a narrower reporting boundary. Or the varying definitions may reflect different methods or conversion factors that have been employed in reporting the same metric.

In a recent data-cleansing exercise involving close to 2,000 companies and five indicators over a five-year period, CK Capital found nearly 10% of the datapoints reflect these sorts of inconsistencies. Potential differences in reporting boundaries or calculation methodologies reduce the reliability of sustainability data and hamper the ability of stakeholders to make objective comparisons of the sustainability performance of reporting companies. This problem primarily stems from the absence of a globally accepted and standardized accounting practice for sustainability disclosures. The lack of a sustainability disclosure auditing framework that is accepted and practised by all reporting companies globally further compounds this problem.

By considering total energy consumption, the following analysis illustrates the variability in the reported figures. The reported total energy consumption (in gigajoules) is normalized using total employee count for 2010 – the ratio of which is called "energy productivity". The rationale for using total employee count is that it is the principal reflection of economic activity within a company and hence of energy consumption when considering companies within the same industry. In order to measure and assess the extent of variability, we employ the coefficient of variation (ratio of standard deviation and the mean). The standard deviation is a measure of how tightly the individual energy productivities for a given industry group are clustered around the mean of the energy productivities for the same industry group.

It is recognized that within a given industry group, certain constituents are more productive from an energy point of view than others. However, it is not expected that the energy productivity ratios will diverge significantly from the industry mean at the current state of technology, management techniques and operational imperatives. Hence, the larger the coefficient of variation, the larger the divergence of the actual energy productivity ratios from the industry mean. The larger those divergences are, the more questionable they are in terms of comparability. As a rule of thumb, a coefficient of variation that is greater than 1 indicates high variance. Figure 23 shows the average coefficient of variation on energy productivity ratio in 2010 for composite exchanges with at least 10 disclosers of sustainability data as of 2010.

COMPOSITE STOCK EXCHANGE	COEFFICIENT OF V	ARIATION OF ENERGY PRODUCTIVITY, 2010
PORTUGAL	0.8	
BELGIUM	0.9	
NETHERLANDS	1.0	
FINLAND	1.1	
GREECE	1.1	
RUSSIA	1.2	
MEXICO	1.2	
FRANCE	1.2	
ITALY	1.2	
NORWAY	1.2	
GERMANY	1.3	The sectorized of services differen
SINGAPORE	1.3	among companies on different composi-
SPAIN	1.3	Stock exchanges located in Western E
SWEDEN	1.3	tries lead in terms of the lowest coefficients of variation ca
SWITZERLAND	1.3	generally across companies of all indust
CHILE	1.3	trade in the U.S. and to a lesser extent
DENMARK	1.4	This indicates that energy consumption
<b>FURKEY</b>	1.4	by companies trading on exchanges ba
SOUTH AFRICA	1.4	and in China (among other countries)
IRELAND	1.6	internationally.
BRAZIL	1.6	
AUSTRIA	1.6	This analysis indicates that energy cons
INDIA	1.6	sessed and meta-analyzed in terms of r
AUSTRALIA	1.7	and calculation method. Countries
MALAYSIA	1.7	low coefficients of variation – Portuga Netherlands, Finland and Greece – co
PAKISTAN	2.0	tant case studies for policy-makers. The
JAPAN	2.0	variability of normalized energy perfo
UNITED KINGDOM	2.2	tially be replicated in other jurisdiction
CANADA	2.2	
CHINA	3.2	More broadly, this analysis undersco
UNITED STATES	4.1	framework for sustainability indicators

#### FIGURE 23: VARIATION IN ENERGY PRODUCTIVITY BY COMPOSITE STOCK EXCHANGE, 2010

SOURCE: BLOOMBERG

substantially site exchanges. uropean councient of varian be observed ry groups that in China.

data reported sed in the U.S. nay not be diomestically or

sumption data, needs to be aseporting scope vith relatively , Belgium, the uld be imporrelatively low rmance could could potens.

res the utility tory reporting , supported by uniform definitions and audit procedures.

## APPENDIX B: COMPLETE DATA TABLES FOR FIRST GENERATION SUSTAINABILITY INDICATORS

COMPOSITE Stock Exchange	2006	2007	2008	2009	2010	CAGR IN DISCLOSURE RATE, 2006-2010	TOTAL NUMBER OF MID, LARGE AND MEGA-CAP COMPANIES, 2010
ARGENTINA	0%	17%	100%	33%	14%	-5%	7
AUSTRALIA	65%	62%	61%	64%	63%	-1%	121
AUSTRIA	53%	52%	53%	50%	52%	0%	21
BELGIUM	36%	35%	33%	38%	39%	2%	41
BOTSWANA	0%	0%	0%	0%	0%	0%	0
BRAZIL	25%	29%	44%	34%	40%	13%	147
BULGARIA	0%	0%	0%	0%	0%	0%	0
CANADA	3%	2%	2%	2%	4%	15%	178
CHILE	4%	3%	11%	23%	16%	44%	57
CHINA	36%	18%	38%	26%	41%	3%	388
COLOMBIA	13%	17%	18%	7%	5%	-20%	20
CROATIA	33%	17%	33%	25%	33%	0%	3
CYPRUS	50%	50%	50%	50%	100%	19%	1
CZECH REPUBLIC	75%	75%	67%	67%	67%	-3%	3
DENMARK	74%	78%	85%	81%	75%	0%	20
ESTONIA	0%	0%	0%	0%	0%	0%	0
FINLAND	88%	87%	87%	89%	91%	1%	23
FRANCE	61%	61%	72%	68%	63%	0%	107
GERMANY	67%	65%	67%	60%	61%	-2%	88
GREECE	47%	30%	70%	58%	100%	21%	8
HONG KONG	60%	48%	59%	49%	42%	-8%	208
HUNGARY	75%	75%	50%	50%	50%	-10%	4
INDIA	68%	50%	70%	64%	53%	-6%	125
INDONESIA	12%	17%	10%	17%	11%	-1%	36
IRELAND	54%	67%	80%	50%	63%	4%	8
ISRAEL	33%	29%	43%	38%	26%	-6%	19
ITALY	63%	58%	74%	66%	62%	0%	45
JAPAN	77%	76%	75%	78%	76%	0%	352
JORDAN	50%	33%	25%	33%	33%	-10%	3

#### FIGURE 24: PAYROLL DISCLOSURE RATES, 2006-2010

COMPOSITE Stock Exchange	2006	2007	2008	2009	2010	CAGR IN DISCLOSURE RATE, 2006-2010	TOTAL NUMBER OF MID, LARGE AND MEGA-CAP COMPANIES, 2010
KAZAKHSTAN	0%	0%	25%	33%	33%	0%	3
KENYA	0%	0%	0%	0%	0%	0%	1
KUWAIT	25%	17%	30%	30%	27%	2%	11
LATVIA	0%	0%	0%	0%	0%	0%	0
LITHUANIA	0%	0%	0%	0%	0%	0%	0
MALAYSIA	100%	71%	100%	89%	66%	-10%	38
MEXICO	3%	3%	0%	0%	0%	0%	34
NETHERLANDS	61%	66%	67%	64%	66%	2%	29
NEW ZEALAND	67%	80%	100%	100%	100%	11%	4
NORWAY	52%	58%	88%	59%	50%	-1%	20
PAKISTAN	60%	38%	100%	100%	100%	14%	3
PERU	13%	10%	14%	8%	0%	0%	17
PHILIPPINES	25%	23%	25%	30%	22%	-3%	23
POLAND	20%	22%	38%	29%	29%	10%	17
PORTUGAL	92%	93%	91%	92%	91%	0%	11
QATAR	14%	8%	8%	8%	7%	-16%	14
RUSSIA	26%	25%	40%	40%	29%	3%	59
SINGAPORE	66%	60%	74%	66%	60%	-2%	52
SOUTH AFRICA	74%	77%	70%	73%	64%	-4%	58
SOUTH KOREA	11%	10%	14%	9%	9%	-7%	94
SPAIN	67%	62%	73%	78%	79%	4%	38
SRI LANKA	0%	0%	0%	0%	0%	0%	0
SWEDEN	72%	67%	79%	66%	58%	-5%	45
SWITZERLAND	70%	70%	68%	68%	68%	-1%	65
THAILAND	23%	27%	50%	31%	22%	-1%	23
TURKEY	16%	19%	29%	27%	23%	10%	30
UNITED ARAB EMIRATES	7%	4%	7%	8%	8%	4%	12
UNITED KINGDOM	91%	89%	85%	84%	80%	-3%	178
UNITED STATES	10%	9%	11%	10%	9%	-1%	1150

COMPOSITE Stock Exchange	2006	2007	2008	2009	2010	CAGR IN DISCLOSURE RATE, 2006-2010	TOTAL NUMBER OF MID, LARGE AND MEGA-CAP COMPANIES, 2010
ARGENTINA	0%	0%	0%	0%	0%	0%	7
AUSTRALIA	18%	26%	31%	35%	36%	19%	121
AUSTRIA	11%	26%	27%	28%	33%	33%	21
BELGIUM	9%	20%	22%	21%	20%	21%	41
BOTSWANA	0%	0%	0%	0%	0%	0%	0
BRAZIL	6%	15%	32%	29%	26%	43%	147
BULGARIA	0%	0%	0%	0%	0%	0%	0
CANADA	10%	16%	28%	21%	19%	16%	178
CHILE	0%	7%	11%	13%	12%	23%	57
CHINA	0%	1%	10%	10%	8%	122%	388
COLOMBIA	0%	0%	0%	7%	10%	0%	20
CROATIA	0%	17%	33%	25%	33%	26%	3
CYPRUS	0%	0%	0%	0%	0%	0%	1
CZECH REPUB- LIC	0%	0%	0%	0%	0%	0%	3
DENMARK	30%	35%	54%	63%	55%	16%	20
ESTONIA	0%	0%	0%	0%	0%	0%	0
FINLAND	32%	57%	67%	63%	78%	25%	23
FRANCE	30%	39%	50%	50%	51%	14%	107
GERMANY	26%	35%	55%	43%	39%	10%	88
GREECE	6%	22%	40%	50%	63%	81%	8
HONG KONG	3%	5%	10%	9%	9%	36%	208
HUNGARY	0%	50%	50%	50%	50%	0%	4
INDIA	21%	23%	33%	36%	32%	12%	125
INDONESIA	0%	4%	20%	13%	8%	26%	36
IRELAND	8%	25%	40%	33%	38%	49%	8
ISRAEL	0%	14%	14%	15%	11%	-10%	19
ITALY	26%	42%	66%	57%	60%	23%	45
JAPAN	49%	61%	63%	67%	65%	7%	352
JORDAN	0%	0%	0%	0%	33%	0%	3

#### FIGURE 25: ENERGY DISCLOSURE RATES, 2006-2010

COMPOSITE Stock Exchange	2006	2007	2008	2009	2010	CAGR IN DISCLOSURE RATE, 2006-2010	TOTAL NUMBER OF MID, LARGE AND MEGA-CAP COMPANIES, 2010
KAZAKHSTAN	0%	0%	0%	0%	0%	0%	3
KENYA	0%	0%	0%	0%	0%	0%	1
KUWAIT	0%	0%	0%	0%	0%	0%	11
LATVIA	0%	0%	0%	0%	0%	0%	0
LITHUANIA	0%	0%	0%	0%	0%	0%	0
MALAYSIA	0%	3%	5%	11%	8%	35%	38
MEXICO	3%	6%	5%	15%	21%	56%	34
NETHERLANDS	15%	56%	76%	76%	66%	44%	29
NEW ZEALAND	0%	20%	50%	33%	50%	36%	4
NORWAY	14%	26%	63%	47%	45%	33%	20
PAKISTAN	0%	0%	0%	0%	0%	0%	3
PERU	0%	0%	0%	0%	0%	0%	17
PHILIPPINES	0%	0%	0%	0%	9%	0%	23
POLAND	0%	0%	0%	14%	6%	0%	17
PORTUGAL	31%	50%	64%	62%	64%	20%	11
QATAR	0%	0%	0%	0%	0%	0%	14
RUSSIA	0%	7%	28%	18%	17%	33%	59
SINGAPORE	0%	4%	7%	9%	10%	36%	52
SOUTH AFRICA	3%	18%	37%	53%	59%	119%	58
SOUTH KOREA	6%	8%	12%	12%	7%	7%	94
SPAIN	16%	42%	58%	66%	66%	43%	38
SRI LANKA	0%	0%	0%	0%	0%	0%	0
SWEDEN	24%	44%	54%	42%	53%	22%	45
SWITZERLAND	22%	38%	38%	41%	43%	18%	65
THAILAND	0%	7%	25%	13%	4%	-13%	23
TURKEY	0%	0%	0%	4%	3%	0%	30
UNITED ARAB EMIRATES	0%	4%	7%	8%	8%	24%	12
UNITED KING- DOM	35%	41%	64%	56%	46%	7%	178
UNITED STATES	6%	10%	16%	15%	12%	17%	1150

COMPOSITE Stock Exchange	2006	2007	2008	2009	2010	CAGR IN DISCLOSURE RATE, 2006-2010	TOTAL NUMBER OF MID, LARGE AND MEGA-CAP COMPANIES, 2010
ARGENTINA	0%	0%	0%	0%	0%	0%	7
AUSTRALIA	19%	20%	34%	30%	26%	7%	121
AUSTRIA	16%	13%	27%	22%	24%	11%	21
BELGIUM	9%	17%	22%	19%	17%	17%	41
BOTSWANA	0%	0%	0%	0%	0%	0%	0
BRAZIL	6%	15%	33%	30%	27%	45%	147
BULGARIA	0%	0%	0%	0%	0%	0%	0
CANADA	7%	11%	19%	17%	13%	19%	178
CHILE	0%	3%	5%	6%	9%	38%	57
CHINA	0%	2%	9%	6%	6%	48%	388
COLOMBIA	0%	0%	0%	14%	15%	0%	20
CROATIA	0%	17%	33%	25%	33%	26%	3
CYPRUS	0%	0%	0%	0%	0%	0%	1
CZECH REPUBLIC	0%	25%	33%	33%	33%	10%	3
DENMARK	30%	35%	54%	63%	60%	18%	20
ESTONIA	0%	0%	0%	0%	0%	0%	0
FINLAND	24%	39%	53%	63%	70%	30%	23
FRANCE	33%	43%	56%	58%	56%	14%	107
GERMANY	23%	37%	55%	38%	35%	11%	88
GREECE	6%	26%	70%	67%	63%	81%	8
HONG KONG	3%	6%	11%	8%	8%	24%	208
HUNGARY	0%	50%	50%	50%	50%	0%	4
INDIA	5%	7%	13%	14%	8%	10%	125
INDONESIA	0%	4%	10%	9%	6%	10%	36
IRELAND	8%	8%	20%	17%	25%	34%	8
ISRAEL	0%	7%	0%	23%	11%	0%	19
ITALY	23%	40%	66%	57%	53%	24%	45
JAPAN	51%	61%	64%	68%	63%	6%	352
JORDAN	0%	0%	0%	0%	33%	0%	3

#### FIGURE 26: WATER DISCLOSURE RATES, 2006-2010

COMPOSITE Stock Exchange	2006	2007	2008	2009	2010	CAGR IN DISCLOSURE RATE, 2006-2010	TOTAL NUMBER OF MID, LARGE AND MEGA-CAP COMPANIES, 2010
KAZAKHSTAN	0%	0%	0%	0%	0%	0%	3
KENYA	0%	0%	0%	0%	0%	0%	1
KUWAIT	0%	0%	0%	0%	0%	0%	11
LATVIA	0%	0%	0%	0%	0%	0%	0
LITHUANIA	0%	0%	0%	0%	0%	0%	0
MALAYSIA	0%	3%	14%	19%	11%	48%	38
MEXICO	0%	3%	10%	12%	12%	57%	34
NETHERLANDS	9%	41%	57%	52%	48%	52%	29
NEW ZEALAND	0%	0%	0%	0%	0%	0%	4
NORWAY	5%	21%	38%	24%	25%	51%	20
PAKISTAN	0%	0%	0%	0%	0%	0%	3
PERU	0%	0%	0%	0%	0%	0%	17
PHILIPPINES	0%	0%	0%	10%	17%	0%	23
POLAND	0%	6%	13%	14%	0%	0%	17
PORTUGAL	23%	64%	64%	77%	73%	33%	11
QATAR	0%	0%	0%	0%	0%	0%	14
RUSSIA	3%	18%	44%	31%	20%	63%	59
SINGAPORE	0%	6%	11%	14%	13%	33%	52
SOUTH AFRICA	3%	16%	41%	53%	53%	114%	58
SOUTH KOREA	7%	7%	10%	9%	7%	1%	94
SPAIN	24%	47%	60%	68%	68%	31%	38
SRI LANKA	0%	0%	0%	0%	0%	0%	0
SWEDEN	22%	35%	50%	42%	44%	19%	45
SWITZERLAND	24%	36%	36%	42%	42%	15%	65
THAILAND	0%	7%	25%	13%	9%	9%	23
TURKEY	0%	4%	0%	8%	10%	0%	30
UNITED ARAB EMIRATES	0%	4%	7%	8%	8%	24%	12
UNITED Kingdom	33%	42%	63%	50%	40%	5%	178
UNITED STATES	6%	10%	17%	15%	12%	17%	1150

COMPOSITE Stock Exchange	2006	2007	2008	2009	2010	CAGR IN DISCLOSURE RATE, 2006-2010	TOTAL NUMBER OF MID, LARGE AND MEGA-CAP COMPANIES, 2010
ARGENTINA	0%	0%	0%	0%	0%	0%	7
AUSTRALIA	12%	14%	24%	21%	18%	12%	121
AUSTRIA	16%	17%	27%	22% 24%		11%	21
BELGIUM	5%	15%	19%	19% 17%		44%	41
BOTSWANA	0%	0%	0% 0%		0%	0%	0
BRAZIL	5%	9%	20%	23%	24%	48%	147
BULGARIA	0%	0%	0%	0%	0%	0%	0
CANADA	8%	11%	19%	14%	12%	13%	178
CHILE	0%	7%	11%	10%	7%	2%	57
CHINA	0%	1%	5%	5%	4%	54%	388
COLOMBIA	0%	0%	0%	14%	10%	0%	20
CROATIA	0%	17%	33%	25%	33%	26%	3
CYPRUS	0%	0%	0%	0%	0%	0%	1
CZECH REPUBLIC	0%	25%	33%	33%	0%	0%	3
DENMARK	22%	30%	46%	56%	50%	23%	20
ESTONIA	0%	0%	0%	0%	0%	0%	0
FINLAND	28%	48%	60%	68%	83%	31%	23
FRANCE	26%	34%	41%	45%	47%	16%	107
GERMANY	25%	35%	52%	38%	35%	9%	88
GREECE	6%	4%	20%	25%	50%	71%	8
HONG KONG	1%	2%	5%	4%	6%	61%	208
HUNGARY	0%	75%	50%	50%	50%	-13%	4
INDIA	4%	5%	10%	11%	6%	12%	125
INDONESIA	0%	4%	10%	4%	0%	0%	36
IRELAND	8%	17%	20%	17%	25%	34%	8
ISRAEL	0%	0%	0%	8%	5%	0%	19
ITALY	25%	35%	66%	57%	58%	24%	45
JAPAN	50%	62%	64%	68%	64%	6%	352
JORDAN	0%	0%	0%	0%	0%	0%	3

#### FIGURE 27: WASTE DISCLOSURE RATES, 2006-2010

COMPOSITE Stock Exchange	2006	2007	2008	2009	2010	CAGR IN DISCLOSURE RATE, 2006-2010	TOTAL NUMBER OF MID, LARGE AND MEGA-CAP COMPANIES, 2010
KAZAKHSTAN	0%	0%	0%	0%	0%	0%	3
KENYA	0%	0%	0%	0%	0%	0%	1
KUWAIT	0%	0%	0%	0%	0%	0%	11
LATVIA	0%	0%	0%	0%	0%	0%	0
LITHUANIA	0%	0%	0%	0%	0%	0%	0
MALAYSIA	0%	6%	5%	11%	5%	-7%	38
MEXICO	3%	3%	5%	12%	15%	44%	34
NETHERLANDS	12%	41%	52%	48%	41%	36%	29
NEW ZEALAND	0%	0%	0%	33%	25%	0%	4
NORWAY	5%	16%	50%	29%	30%	58%	20
PAKISTAN	0%	0%	0%	0%	0%	0%	3
PERU	0%	0%	0%	0%	0%	0%	17
PHILIPPINES	0%	0%	0%	10%	13%	0%	23
POLAND	0%	6%	25%	21%	0%	0%	17
PORTUGAL	8%	43%	36%	46%	36%	47%	11
QATAR	0%	0%	0%	0%	0%	0%	14
RUSSIA	3%	16%	40%	27%	20%	63%	59
SINGAPORE	0%	2%	4%	7%	8%	59%	52
SOUTH AFRICA	3%	9%	19%	18%	19%	65%	58
SOUTH KOREA	6%	8%	8%	8%	6%	3%	94
SPAIN	16%	42%	50%	59%	55%	37%	38
SRI LANKA	0%	0%	0%	0%	0%	0%	0
SWEDEN	18%	26%	43%	39%	36%	19%	45
SWITZERLAND	22%	34%	34%	36%	35%	12%	65
THAILAND	0%	7%	25%	13%	9%	9%	23
TURKEY	0%	4%	0%	4%	7%	0%	30
UNITED ARAB EMIRATES	0%	0%	0%	0%	0%	0%	12
UNITED Kingdom	29%	41%	62%	50%	41%	9%	178
UNITED STATES	5%	8%	13%	12%	9%	15%	1150

COMPOSITE Stock Exchange	2006	2007	2008	2009	2010	CAGR IN DISCLOSURE RATE, 2006-2010	TOTAL NUMBER OF MID, LARGE AND MEGA-CAP COMPANIES, 2010
ARGENTINA	0%	0%	0%	0%	0%	0%	7
AUSTRALIA	28%	37%	55%	46%	40%	9%	121
AUSTRIA	5%	9%	20%	11% 10%		16%	21
BELGIUM	7%	17%	22%	17%	12%	16%	41
BOTSWANA	0%	0%	0% 0%		0%	0%	0
BRAZIL	1%	12%	24%	23%	22%	105%	147
BULGARIA	0%	0%	0%	0%	0%	0%	0
CANADA	11%	24%	41%	29%	21%	18%	178
CHILE	0%	0%	0%	3%	4%	0%	57
CHINA	1%	2%	4%	4%	4%	37%	388
COLOMBIA	0%	0%	0%	14%	10%	0%	20
CROATIA	0%	0%	0%	0%	0%	0%	3
CYPRUS	0%	0%	0%	0%	0%	0%	1
CZECH REPUBLIC	0%	0%	0%	0%	0%	0%	3
DENMARK	17%	30%	54%	44%	35%	19%	20
ESTONIA	0%	0%	0%	0%	0%	0%	0
FINLAND	16%	30%	60%	37%	52%	34%	23
FRANCE	20%	34%	43%	42%	42%	20%	107
GERMANY	20%	29%	37%	35%	28%	10%	88
GREECE	6%	9%	30%	25%	38%	59%	8
HONG KONG	3%	5%	9%	6%	6%	25%	208
HUNGARY	0%	0%	25%	25%	25%	0%	4
INDIA	4%	7%	10%	10%	9%	21%	125
INDONESIA	0%	0%	0%	0%	0%	0%	36
IRELAND	0%	17%	20%	17%	13%	-9%	8
ISRAEL	0%	7%	14%	8%	11%	14%	19
ITALY	12%	20%	39%	32%	31%	26%	45
JAPAN	21%	33%	23%	26%	23%	3%	352
JORDAN	0%	0%	0%	0%	33%	0%	3

#### FIGURE 28: GHG EMISSIONS DISCLOSURE RATES, 2006-2010

COMPOSITE Stock Exchange	2006	2007	2008	2009	2010	CAGR IN DISCLOSURE RATE, 2006-2010	TOTAL NUMBER OF MID, LARGE AND MEGA-CAP COMPANIES, 2010
KAZAKHSTAN	0%	0%	0%	0%	0%	0%	3
KENYA	0%	0%	0%	0%	0%	0%	1
KUWAIT	0%	0%	0%	0%	0%	0%	11
LATVIA	0%	0%	0%	0%	0%	0%	0
LITHUANIA	0%	0%	0%	0%	0%	0%	0
MALAYSIA	0%	3%	5%	7%	5%	18%	38
MEXICO	0%	3%	10%	12%	18%	80%	34
NETHERLANDS	18%	44%	57%	40%	38%	20%	29
NEW ZEALAND	0%	60%	100%	67%	75%	8%	4
NORWAY	14%	26%	63%	29%	30%	20%	20
PAKISTAN	0%	0%	0%	0%	0%	0%	3
PERU	0%	0%	0%	0%	0%	0%	17
PHILIPPINES	0%	0%	13%	20%	17%	0%	23
POLAND	0%	0%	0%	0%	0%	0%	17
PORTUGAL	15%	14%	55%	38%	45%	31%	11
QATAR	0%	0%	0%	0%	0%	0%	14
RUSSIA	0%	2%	8%	7%	3%	24%	59
SINGAPORE	0%	2%	4%	7%	8%	59%	52
SOUTH AFRICA	3%	14%	44%	47%	50%	110%	58
SOUTH KOREA	3%	5%	14%	11%	6%	22%	94
SPAIN	12%	31%	38%	41%	39%	35%	38
SRI LANKA	0%	0%	0%	0%	0%	0%	0
SWEDEN	18%	35%	50%	37%	40%	22%	45
SWITZERLAND	20%	31%	36%	34%	31%	11%	65
THAILAND	0%	7%	25%	19%	4%	-13%	23
TURKEY	0%	0%	0%	4%	3%	0%	30
UNITED ARAB EMIRATES	0%	4%	7%	8%	8%	24%	12
UNITED KINGDOM	33%	47%	69%	58%	48%	10%	178
UNITED STATES	10%	19%	30%	20%	15%	9%	1150

COMPOSITE Stock Exchange	2006	2007	2008	2009	2010	CAGR IN DISCLOSURE RATE, 2006-2010	TOTAL NUMBER OF MID, LARGE AND MEGA-CAP COMPANIES, 2010
ARGENTINA	0%	0%	0%	0%	0%	0%	7
AUSTRALIA	12%	16%	24%	17%	17%	9%	121
AUSTRIA	0%	17%	27%	22% 24%		11%	21
BELGIUM	5%	7%	8% 7%		7%	13%	41
BOTSWANA	0%	0%	0% 0%		0%	0%	0
BRAZIL	2%	9%	18% 15%		20%	68%	147
BULGARIA	0%	0%	0%	0%	0%	0%	0
CANADA	5%	11%	15%	11%	10%	17%	178
CHILE	0%	7%	11%	13%	9%	10%	57
CHINA	1%	1%	5%	7%	6%	54%	388
COLOMBIA	0%	0%	0%	7%	10%	0%	20
CROATIA	0%	0%	0%	0%	0%	0%	3
CYPRUS	0%	0%	0%	0%	0%	0%	1
CZECH REPUBLIC	0%	0%	0%	0%	0%	0%	3
DENMARK	13%	30%	38%	38%	30%	23%	20
ESTONIA	0%	0%	0%	0%	0%	0%	0
FINLAND	12%	35%	53%	42%	39%	34%	23
FRANCE	16%	27%	38%	35%	36%	23%	107
GERMANY	14%	21%	25%	26%	25%	16%	88
GREECE	6%	13%	20%	8%	0%	0%	8
HONG KONG	0%	2%	4%	3%	4%	18%	208
HUNGARY	0%	50%	50%	50%	50%	0%	4
INDIA	3%	4%	10%	10%	6%	24%	125
INDONESIA	0%	0%	0%	0%	0%	0%	36
IRELAND	8%	25%	40%	17%	25%	34%	8
ISRAEL	0%	0%	0%	0%	0%	0%	19
ITALY	12%	27%	55%	49%	42%	36%	45
JAPAN	1%	1%	2%	2%	2%	32%	352
JORDAN	0%	0%	0%	0%	33%	0%	3

#### FIGURE 29: EMPLOYEE TURNOVER DISCLOSURE RATES, 2006-2010

STUCK Exchange	2006	2007	2008	2009	2010	RATE, 2006-2010	AND MEGA-CAP COMPANIES, 2010
KAZAKHSTAN	0%	0%	0%	0%	0%	0%	3
KENYA	0%	0%	0%	0%	0%	0%	1
KUWAIT	0%	0%	0%	0%	0%	0%	11
LATVIA	0%	0%	0%	0%	0%	0%	0
LITHUANIA	0%	0%	0%	0%	0%	0% 0%	
MALAYSIA	0%	6%	5%	7%	8%	7%	38
MEXICO	0%	0%	0%	12%	15%	0%	34
NETHERLANDS	9%	28%	24%	28%	28%	32%	29
NEW ZEALAND	0%	20%	0%	0%	0%	0%	4
NORWAY	0%	5%	38%	12%	15%	42%	20
PAKISTAN	0%	0%	0%	0%	0%	0%	3
PERU	0%	0%	0%	0%	0%	0%	17
PHILIPPINES	0%	0%	0%	10%	22%	0%	23
POLAND	0%	0%	0%	14%	0%	0%	17
PORTUGAL	15%	29%	27%	31%	27%	15%	11
QATAR	0%	0%	0%	0%	0%	0%	14
RUSSIA	0%	7%	28%	18%	14%	24%	59
SINGAPORE	0%	2%	4%	9%	10%	71%	52
SOUTH AFRICA	3%	11%	26%	38%	26%	78%	58
SOUTH KOREA	0%	1%	2%	1%	4%	58%	94
SPAIN	6%	20%	33%	37%	39%	61%	38
SRI LANKA	0%	0%	0%	0%	0%	0%	0
SWEDEN	6%	21%	43%	34%	38%	<b>58%</b>	45
SWITZERLAND	17%	25%	24%	32%	28%	14%	65
THAILAND	0%	0%	25%	6%	0%	0%	23
TURKEY	0%	0%	7%	8%	7%	0%	30
UNITED ARAB EMIRATES	0%	4%	7%	8%	8%	24%	12
UNITED KINGDOM	19%	22%	34%	32%	26%	7%	178
UNITED STATES	2%	3%	6%	4%	3%	18%	1150

SOURCE: BLOOMBERG

2009

2008

COMPOSITE Stock

2006

2007

TOTAL NUMBER OF MID, LARGE AND MEGA-CAP

CAGR IN DISCLOSURE

2010

COMPOSITE Stock Exchange	2006	2007	2008	2009	2010	CAGR IN DISCLOSURE RATE, 2006-2010	TOTAL NUMBER OF MID, LARGE AND MEGA-CAP COMPANIES, 2010
ARGENTINA	0%	0%	0%	0%	0%	0%	7
AUSTRALIA	15%	24%	28%	30%	29%	17%	121
AUSTRIA	5%	4%	7%	6%	10%	16%	21
BELGIUM	2%	9%	11%	11% 12%		44%	41
BOTSWANA	0%	0%	0% 0%		0%	0%	0
BRAZIL	0%	3%	9% 9%		8%	34%	147
BULGARIA	0%	0%	0%	0%	0%	0%	0
CANADA	5%	11%	17%	17%	11%	22%	178
CHILE	0%	7%	5%	3%	0%	0%	57
CHINA	1%	1%	2%	1%	1%	6%	388
COLOMBIA	0%	0%	0%	0%	10%	0%	20
CROATIA	0%	17%	33%	25%	33%	26%	3
CYPRUS	0%	0%	0%	0%	0% 0%	0%	1
CZECH REPUBLIC	0%	0%	0%	0%	0%	0%	3
DENMARK	9%	26%	38%	38%	35%	42%	20
ESTONIA	0%	0%	0%	0%	0%	0%	0
FINLAND	12%	30%	53%	37%	26%	21%	23
FRANCE	12%	18%	24%	27%	25%	21%	107
GERMANY	7%	13%	21%	19%	17%	23%	88
GREECE	0%	17%	20%	25%	13%	-10%	8
HONG KONG	1%	2%	5%	4%	4%	50%	208
HUNGARY	0%	25%	25%	25%	25%	0%	4
INDIA	3%	2%	5%	7%	4%	10%	125
INDONESIA	0%	0%	0%	4%	0%	0%	36
IRELAND	8%	8%	20%	33%	38%	49%	8
ISRAEL	0%	0%	0%	0%	0%	0%	19
ITALY	5%	12%	24%	19%	22%	43%	45
JAPAN	11%	13%	15%	16%	15%	9%	352
JORDAN	0%	0%	0%	0%	0%	0%	3

#### FIGURE 30: LOST TIME INJURY RATE DISCLOSURE RATES, 2006-2010

KENYA	0%	0%	0%	0%	0%	0%	1
KUWAIT	0%	0%	0%	0%	0%	0%	11
LATVIA	0%	0%	0%	0%	0%	0%	0
LITHUANIA	0%	0%	0%	0%	0%	0%	0
MALAYSIA	0%	3%	10%	7%	8%	35%	38
MEXICO	0%	3%	0%	8%	9%	0%	34
NETHERLANDS	3%	9%	19%	16%	21%	62%	29
NEW ZEALAND	0%	40%	50%	67%	50%	8%	4
NORWAY	0%	21%	38%	41%	35%	18%	20
PAKISTAN	0%	0%	0%	0%	0%	0%	3
PERU	0%	0%	0%	0%	0%	0%	17
PHILIPPINES	0%	0%	0%	0%	4%	0%	23
POLAND	0%	0%	0%	7%	0%	0%	17
PORTUGAL	8%	7%	18%	15%	18%	24%	11
QATAR	0%	0%	0%	0%	0%	0%	14
RUSSIA	0%	0%	0%	2%	0%	0%	59
SINGAPORE	3%	2%	4%	5%	4%	10%	52
SOUTH AFRICA	3%	14%	33%	27%	31%	87%	58
SOUTH KOREA	1%	2%	2%	3%	2%	10%	94
SPAIN	8%	11%	15%	15%	13%	14%	38
SRI LANKA	0%	0%	0%	0%	0%	0%	0
SWEDEN	2%	14%	18%	18%	16%	67%	45
SWITZERLAND	6%	8%	16%	14%	11%	18%	65
THAILAND	0%	7%	25%	13%	4%	-13%	23
TURKEY	0%	0%	0%	0%	0%	0%	30
UNITED ARAB EMIRATES	0%	0%	0%	0%	0%	0%	12
UNITED KINGDOM	18%	21%	28%	26%	26%	10%	178
UNITED STATES	3%	5%	8%	7%	6%	17%	1150

SOURCE: BLOOMBERG

2009

0%

2010

0%

2008

0%

COMPOSITE Stock Exchange

KAZAKHSTAN

2006

0%

2007

0%

TOTAL NUMBER OF MID, LARGE AND MEGA-CAP

COMPANIES, 2010

3

CAGR IN DISCLOSURE

RATE, 2006-2010

0%

# APPENDIX C: RANKING DATA TABLES

COMPOSITE EXCHANGE	AVERAGE NUMBER OF FIRST Generation Sustainability Metrics Disclosed, 2010	PERCENT RANK	DISCLOSURE SCORE (MAX 50)	CAGR IN FIRST GENERATION SUSTAINABILITY REPORTING, 2006-2010	PERCENT RANK	DISCLOSURE GROWTH SCORE (MAX 20)	PERCENT OF Q4 YEAR-END Companies reporting SUS- Tainability data as of May 1, 2012	PERCENT RANK	DISCLOSURE TIMELINESS SCORE (MAX 30)	OVERALL SCORE (MAX 100)
NETHERLANDS	3.4	71%	35	35%	88%	18	48%	94%	28	81
DENMARK	3.8	79%	40	20%	56%	11	57%	100%	30	81
FINLAND	4.4	97%	49	25%	68%	14	19%	53%	16	78
SPAIN	4.2	88%	44	32%	82%	16	19%	56%	17	77
SOUTH AFRICA	3.9	82%	41	81%	100%	20	15%	47%	14	75
SWEDEN	3.4	62%	31	29%	71%	14	45%	91%	27	72
NORWAY	3.3	59%	29	32%	79%	16	33%	82%	25	70
ITALY	4.2	94%	47	25%	65%	13	3%	29%	9	69
BRAZIL	3.7	76%	38	51%	97%	19	6%	32%	10	67
FRANCE	4.2	91%	46	15%	44%	9	7%	41%	12	67
AUSTRALIA	3.0	47%	24	10%	24%	5	56%	97%	29	57
UNITED KING- Dom	3.4	65%	32	6%	18%	4	28%	71%	21	57
GERMANY	3.4	68%	34	11%	26%	5	20%	59%	18	57
JAPAN	3.2	56%	28	9%	21%	4	32%	79%	24	56
SWITZERLAND	3.1	53%	26	12%	32%	6	28%	74%	22	55

#### FIGURE 31: RANKING DATA TABLES

COMPOSITE EXCHANGE	AVERAGE NUMBER OF FIRST Generation Sustainability Metrics Disclosed, 2010	PERCENT RANK	DISCLOSURE SCORE (MAX 50)	CAGR IN FIRST GENERATION Sustainability reporting, 2006-2010	PERCENT RANK	DISCLOSURE GROWTH SCORE (MAX 20)	PERCENT OF Q4 YEAR-END Companies reporting SUS- Tainability data as of May 1, 2012	PERCENT RANK	DISCLOSURE TIMELINESS SCORE (Max 30)	OVERALL SCORE (MAX 100)
PORTUGAL	3.9	85%	43	24%	62%	12	0%	0%	0	55
SINGAPORE	1.7	21%	10	38%	91%	18	43%	88%	26	55
HONG KONG	1.7	24%	12	29%	74%	15	38%	85%	26	52
BELGIUM	3.0	50%	25	22%	59%	12	15%	47%	14	51
PHILIPPINES	4.8	100%	50	0%	3%	1	0%	0%	0	51
CHILE	3.6	74%	37	17%	47%	9	0%	0%	0	46
CHINA	1.3	12%	6	46%	94%	19	24%	65%	19	44
MALAYSIA	1.6	18%	9	18%	53%	11	29%	76%	23	42
AUSTRIA	2.6	41%	21	14%	41%	8	10%	44%	13	42
MEXICO	1.9	26%	13	34%	85%	17	7%	38%	11	42
RUSSIA	2.7	44%	22	30%	76%	15	0%	0%	0	37
SOUTH KOREA	2.4	35%	18	13%	38%	8	6%	35%	11	36
CANADA	1.1	9%	4	17%	50%	10	26%	68%	20	35
UNITED STATES	0.9	3%	1	13%	35%	7	22%	62%	19	27
INDIA	2.2	29%	15	12%	29%	6	0%	0%	0	21
THAILAND	2.4	38%	19	-3%	0%	0	0%	0%	0	19
TURKEY	2.3	32%	16	1%	15%	3	0%	0%	0	19
ISRAEL	1.5	15%	7	0%	6%	1	0%	0%	0	9
POLAND	1.0	6%	3	1%	12%	2	0%	0%	0	5
PERU	0.0	0%	0	0%	9%	2	0%	0%	0	2