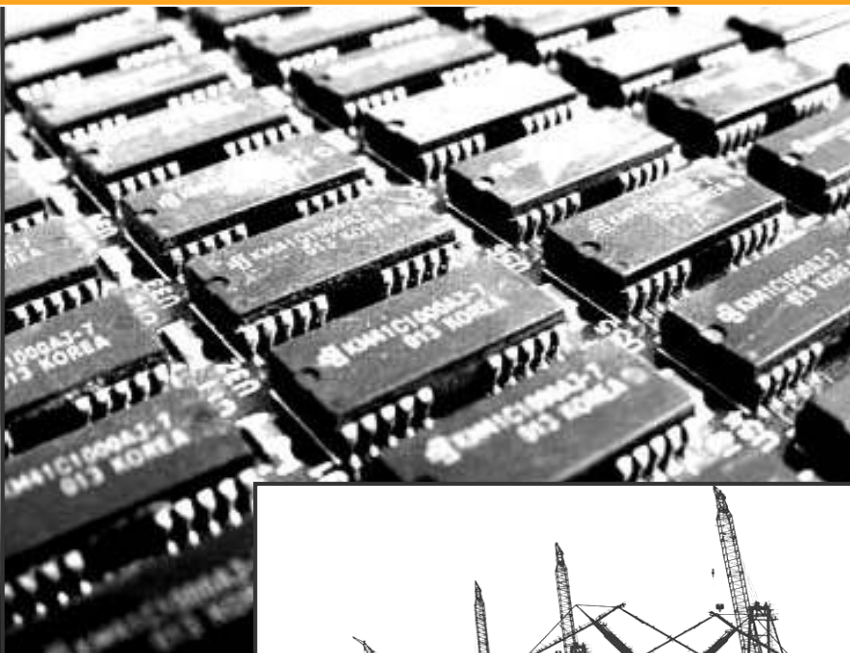


_corporate_sustainability
_survey & trends
_korea



sustainability **_pays.**

Corporate Sustainability Survey 2009

-

Sustainability trends

-

Korea



Survey conducted by SolAbility.

Lead authors: Mi Hyang Lee
Andy Gebhardt

SolAbility is a Korean-Swiss joint-venture based in Korea, providing ESG research to institutional clients and sustainability services to corporate clients

www.solability.com

contact@solability.com

Tel. +82 31 811 3578

© SolAbility. All rights reserved.
Reproduction permitted with citation of source
December 2009

| | | |
|----------|---|-----------|
| 1 | <u>INTRODUCTION</u> | 1 |
| 1.1 | FOREWORD | 1 |
| 1.2 | EXECUTIVE SUMMARY | 2 |
| 1.3 | BACKGROUND | 3 |
| 2 | <u>KOREA SUSTAINABILITY SURVEY 2009</u> | 7 |
| 2.1 | SURVEY BACKGROUND AND RESPONDENTS | 7 |
| 2.2 | CURRENT STATE OF SUSTAINABILITY MANAGEMENT ACTIVITIES | 8 |
| 2.3 | INITIATORS AND DRIVERS OF CORPORATE SUSTAINABILITY | 9 |
| 2.4 | CURRENT FOCUS OF CORPORATE SUSTAINABILITY INITIATIVES | 10 |
| 2.5 | THE BUSINESS CASE | 11 |
| 2.6 | SUSTAINABILITY & PROFITABILITY | 12 |
| 2.7 | THE ECONOMIC CRISIS AND SUSTAINABILITY MANAGEMENT | 13 |
| 2.8 | RESPONSE TO AGING SOCIETY | 15 |
| 2.9 | THE FUTURE OF CORPORATE SUSTAINABILITY IN KOREA | 16 |
| 2.10 | CONCLUSIONS | 17 |
| 3 | <u>ESG RESEARCH EVIDENCE</u> | 18 |
| 3.1 | BACKGROUND | 18 |
| 3.2 | KOREAN SUSTAINABILITY LEADERS – SUSTAINABILITY PAYS! | 19 |
| 3.3 | DEVELOPMENT OF CORPORATE SUSTAINABILITY LEVELS IN KOREA 2007-2009 | 21 |
| 3.4 | DEVELOPMENT OF SELECTED SUSTAINABILITY THEMES – ECONOMIC CRITERIA | 22 |
| 3.5 | DEVELOPMENT OF SELECTED SUSTAINABILITY THEMES – ENVIRONMENTAL | 23 |
| 3.6 | DEVELOPMENT OF SELECTED SUSTAINABILITY THEMES – SOCIAL | 24 |
| 3.7 | SUSTAINABILITY PERFORMANCE IN DIFFERENT INDUSTRY SECTORS | 25 |

1 Introduction

1.1 Foreword

The economy – and, with it, societies in general - have undergone rapid changes over recent decades. The communication and information exchange through Internet alone has triggered fundamental change in the structures of industries and the ways businesses create value. Real-time connectivity is creating new relationships among businesses, customers, employees and partners. People now have access to massive amounts of information – and opinions – about products and company practices. This information is available in every part of the globe, every minute of every day. In addition to the technological advancements, a set of “external” factors are becoming increasingly important – climate change, resource scarcity, aging populations – to name but a few issue that are set to change the environment businesses operate at present and even more so in the future . Business needs to be able to adapt in order to remain successful - and they need to be able to adapt fast.

A growing body of evidence asserts that corporations can do well in financial terms by “doing good”, by “being responsible”, or, most of all, by “being sustainable”. Well-known global companies already have proven that they can differentiate their brands and reputation as well as their products and services if they integrate a long-term approach beyond conventional business thinking, and past market indicators or pure financial considerations both in terms of time (forward looking) and horizon (wide angel perspective).

To the puzzlement of many foreigners coming to Korea, surprised at the countries hyper-modern infrastructure, the country was officially considered and listed as an “emerging market” until autumn 2009. With the country’s fast development to a technologically leading nation, Korean companies need to adapt to the same sustainability challenges in order to consolidate and further expand their global position and competitiveness.

While the concept of “sustainable development” and “corporate sustainability” has arrived here at a later stage compared to European or North American companies, there have been remarkable developments within Korean companies over recent years, which seem to have taken up pace with the focus on “green growth”. This survey is intended to give an overview of current status of corporate sustainability within the Korean corporate landscape and to highlight further development needs.

1.2 Executive Summary

There have been significant advancements in corporate sustainability amongst Korean to the outside observer in recent years. The responses to this survey indicate that sustainability has gained a strong perception as being a valuable business concept – and is set to gain further importance in the future.

Highlights of the responses to this survey include:

- 187 respondents form a variety of business backgrounds, functions, and management levels
- More than 55% of respondents say their organization has implemented sustainability activities at a medium or high level
- Top management commitment is considered crucial, with the CEO perceived as the single most important driver for implementing sustainability management
- Initial sustainability activities were focused on “social responsibility” activities (ethical management, social activities), while climate change risk management and supply chain management is implemented at lower levels. However, with forthcoming new regulation on climate change, many companies are now working on defining a climate change/carbon exposure strategy.
- In the past, the main reason for implementing sustainability has been driven by “responsibility” pressure (social demands, company reputation) rather than “sustainability” issues. However, this notion is has been changing significantly over the last 2 years.
- 65% of respondents indicate that sustainability has become more important at their respective company since the outbreak of the global financial & economic crisis
- 97.8% of respondents expect that their company will have fully implemented sustainability management by 2014

1.3 Background

Korea

The financial and subsequent financial global crises has changed the business perspective on the balance of financial and what, in the past, used to be called “non-financial” or “extra-financial” themes. The changing notion in the Korean specific context is, first of all, reflected in the fast rising number of “non-financial”, i.e. environmental and sustainability reports that have been published in recent years. Part of this is due to increasing social pressure and peer pressure (if a competitor published a report, the company feels it needs to “do something” in the field as well), part it is due to global trends amongst large corporations, and partly it is based on the scientific evidence of the financial and business value of corporate sustainability. However, many companies have started their journey into introducing sustainability measurements by publishing a “Sustainability Report” with no, little, or only partial policies and management systems actually in place, and the sheer number of published sustainability reports is therefore not necessary an indication for implemented sustainability on the policy or management systems or strategic level.

The aim of this survey is to highlight the actual implementation levels of sustainability at Korean companies, and to clarify company representative’s standing on the meaning of corporate sustainability within their own organisations.

Corporate sustainability

The notion of sustainability is best known through its definition of sustainable development through the Brundtland Commission in 1989:

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their needs.”

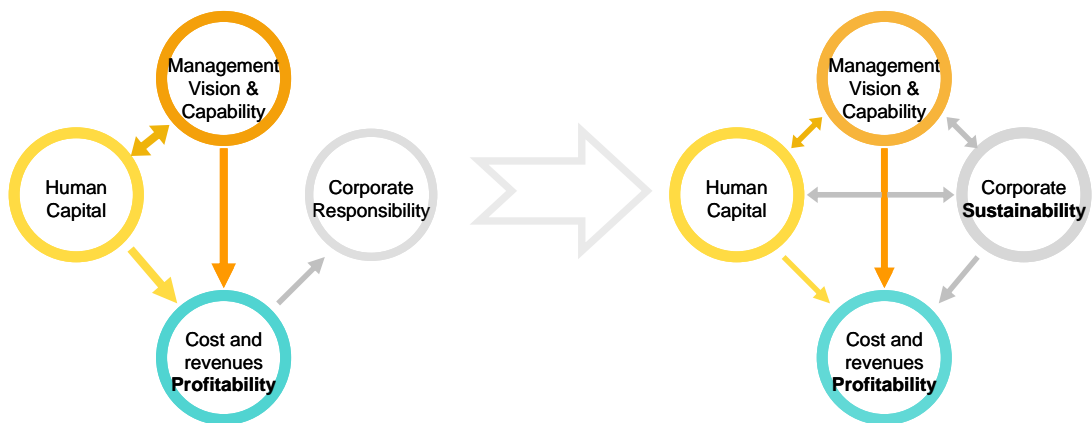
However, what is sustainability in the business context, and how does this definition translate into management decisions? There is currently no globally accepted definition of the concept of “corporate sustainability” and the many terms associated with “sustainability” – CSR (Corporate Social Responsibility), “Corporate Citizenship”, “triple bottom-line” and many others. The different names mean different things to different people, adding to the confusion surrounding the concept. To clarify the meaning of the concept, it might be useful to have a look at the development of sustainability and what “sustainability means in the business context.

| | 1970s | 1980s | 1990s | 2000s | The future |
|-----------------------|---|---|---|--|--|
| | There are limitations to growth | The shock: Chernobyl | Driving responsible | Minimizing risks | Sustainable opportunities |
| Global triggers | Oil shock, acid rain, population fears (“Limits to growth”) | Industrial accidents (Chernobyl, Bhopal), Ozone hole | Appearance of the WWW, shareholder value economy, first reports on climate change | WWW everywhere, “globalisation”, “climate-change-is-happening” consensus, bubble economy | Energy scarcity, aging society, climate change treaties, ? |
| Corporate response | Legal compliance with first environmental legislation | Broadening of management systems to prevent accidents | Reputation driven social activities, ethical management systems, | Minimizing risks and increasing internal efficiency to lower overall costs | Capitalizing on new sustainable development related business opportunities |
| Key management issues | Legal compliance | Environmental risk minimisation | Environmental management, social responsibility | Ethical management, risk minimisation efficiency increase, GHG emissions, | Capitalizing on new opportunities, integrated sustainability management |

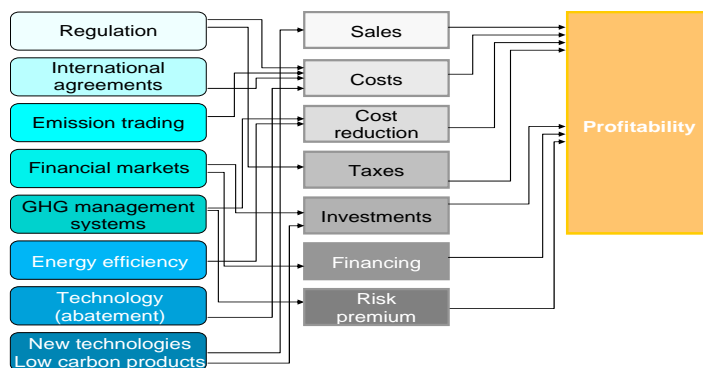
Corporate sustainability management is not a management systems revolution – it is the result of an evolution. This evolution took place over a fairly long period of time, including more and more themes, reflected in a new set of policies and management systems covering a wide range of issues. However, what corporate sustainability essentially means is the ultimate combination of these issues under a single umbrella, integrated into “normal” management and decision making frameworks, and - maybe more importantly so - into management *thinking*.

The evolving business case for sustainability

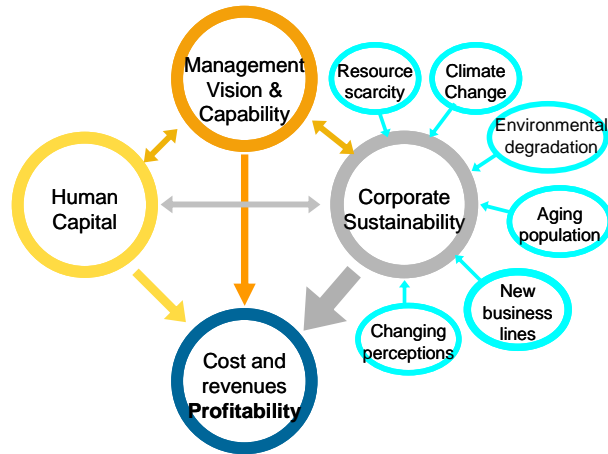
Similar to the evolution of sustainability in the business context, the business case has evolved over time. Corporate responsibility with a focus on social activities has little impact on a company's long-term performance and was therefore often regarded as a luxury for profitable companies before the business value of overall sustainability management was recognised.



The main business case for sustainability is that sustainability makes business sense – on a very real and tangible bottom-line level. The so-called “non-financial” issues *do* have a financial bottom-line impact - if one cares to look at the linkages and implications in detail. Some of the issues have a stronger financial impact than others, and the issues as well as the financial impact of the issue differ from organisation to organisation according to their particular business activities and operations. The financial linkages of sustainability issues can be established by simple flow-charts, as exemplarily drawn out for climate change challenge below:



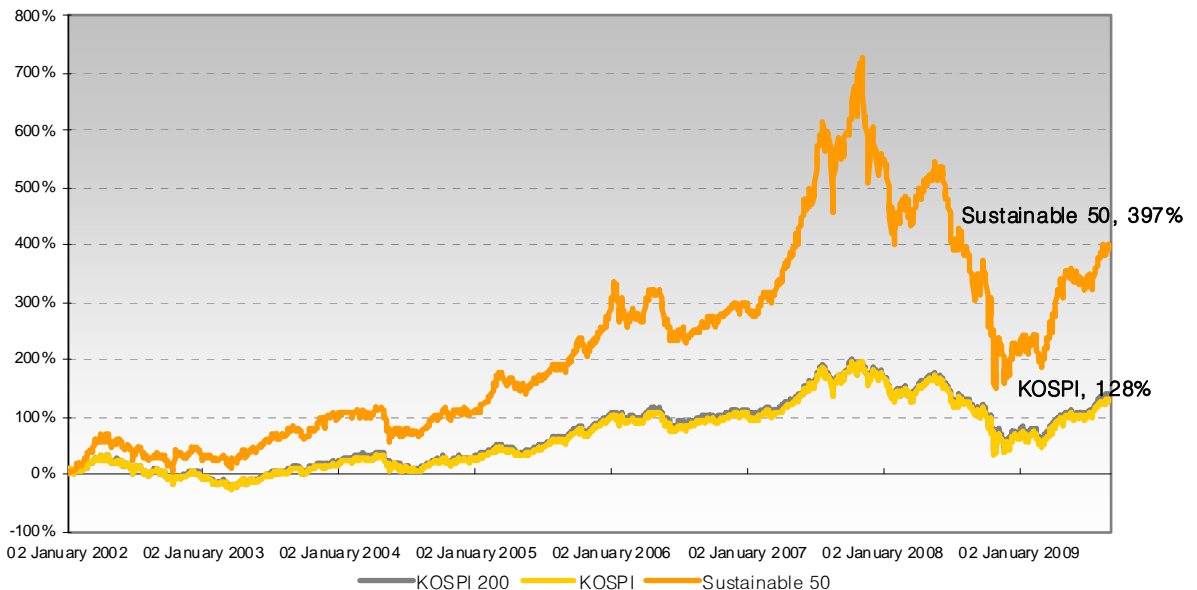
In a constantly accelerating business environment with sustainability mega-trends and challenges yet to reach their peak influence on businesses, the linkages of business sustainability and bottom-line performance are expected to become even stronger in the future:



The ultimate goal of corporate sustainability management is to reduce costs and increase revenues at the same time. Strategic sustainability allows to minimize risks (“financial” and “non-financial”), and to increase internal management and process efficiency (reducing costs), while capitalising on new opportunities through the provision of goods and services in line with changing business environments and customer requirements.

The financial value of sustainability management is underlined by SolAbility’s ESG research on listed Korean companies. The most sustainable companies demonstrate a clear outperformance of the Korean stock exchange over a long range of time.

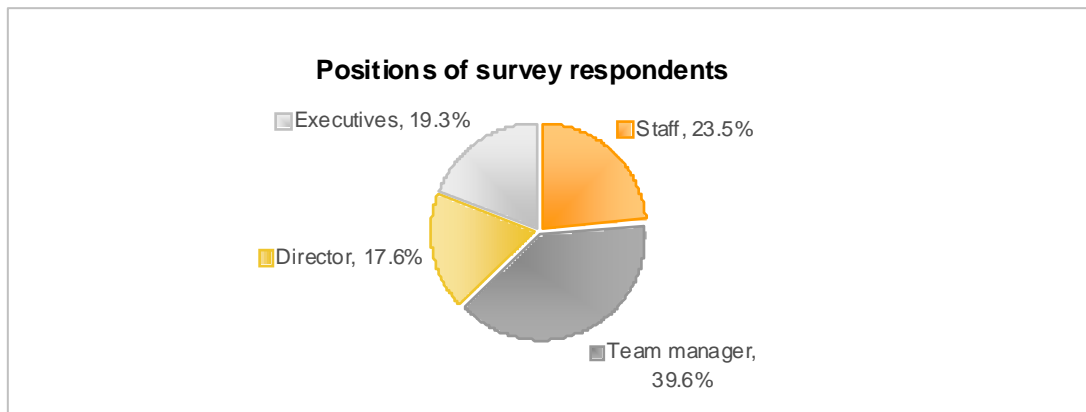
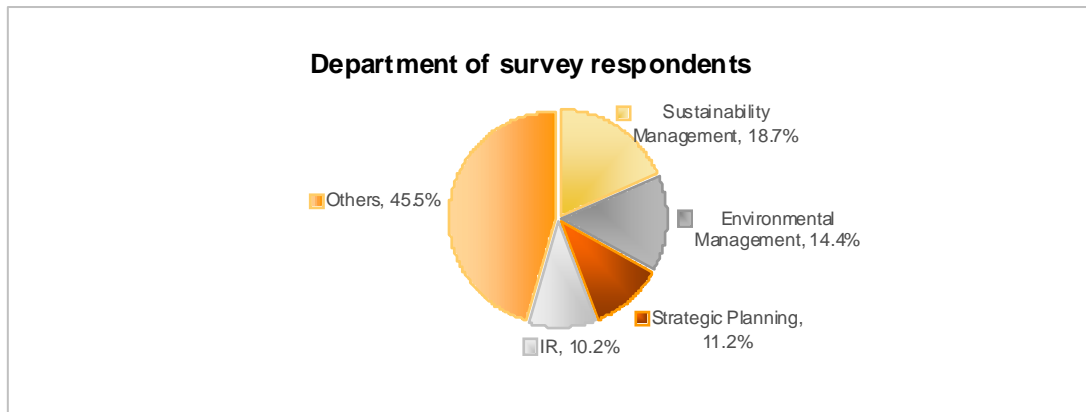
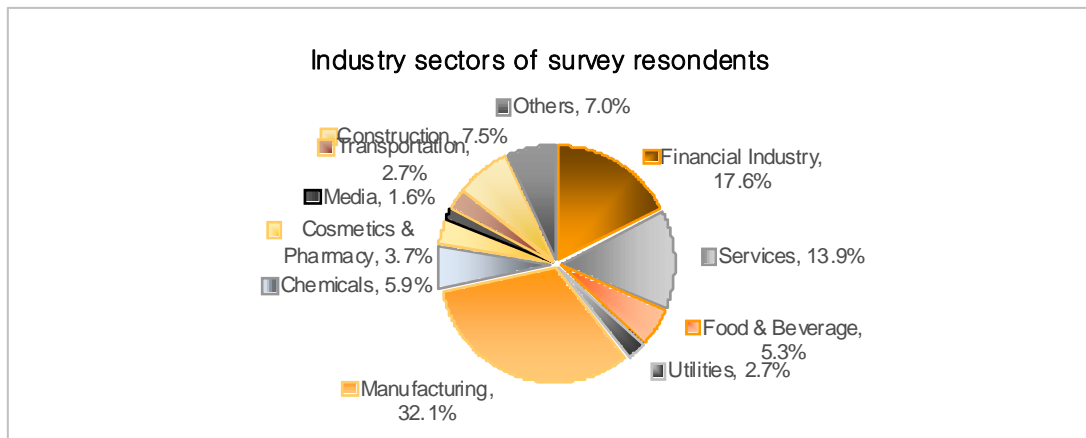
Korea Sustainable 50 performance, 2002-2009



2 Korea Sustainability Survey 2009

2.1 Survey background and respondents

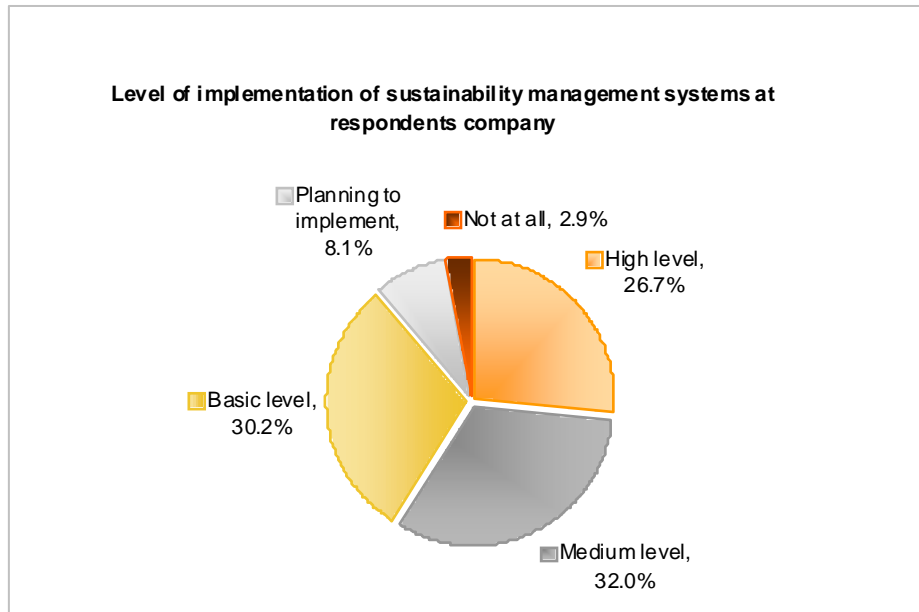
This survey was conducted from July 15th to August 25th 2009 within more than 60 Korean companies from a variety of business sectors. The survey was conducted through on-line questionnaire and telephones. The total number of respondents was 187. Participating survey respondent represent the broad range of the vibrant Korean economy.



2.2 Current state of sustainability management activities

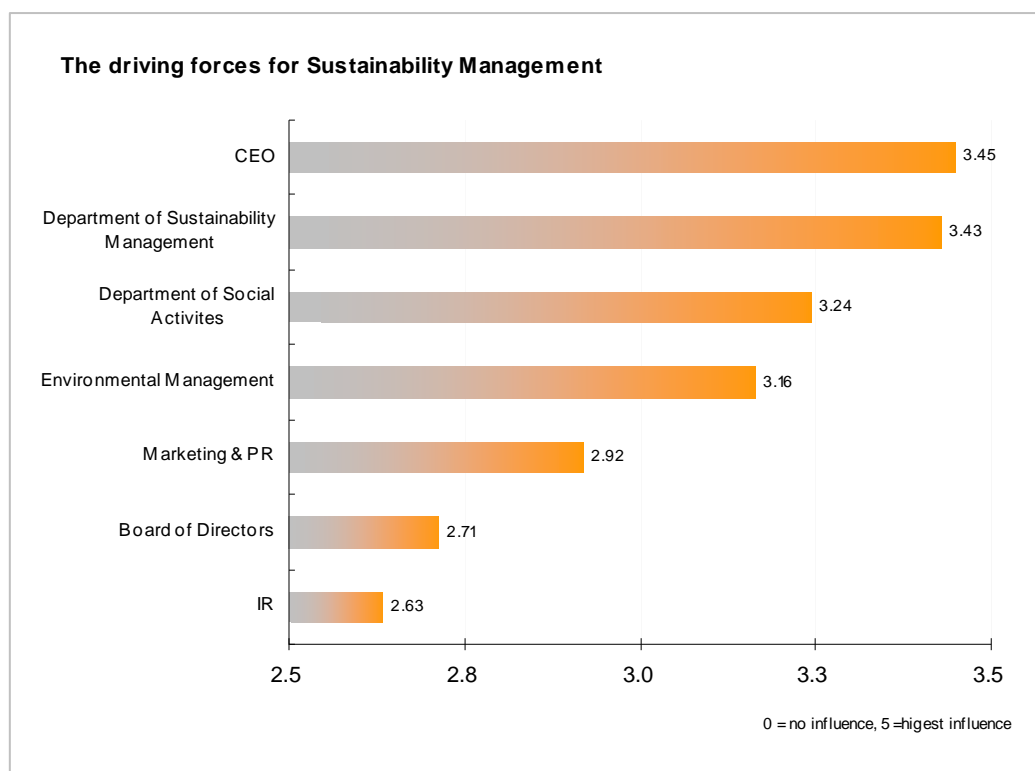
The notion of “sustainability management” was introduced in Korea later than in most other OECD countries, due to a number of reasons – the fast change from a “developing economy” to an “emerging economy” to a “developed country” in a very short space of time (essentially the last 40 years), the financial crisis of 1997/98, and the fact that “corporate sustainability” was first introduced in “western countries”. However, the corporate landscape has been constantly and rapidly modernized, and the changes in terms of sustainability over the last few years have been impressive. According to the self-assessment of Korean companies and sustainability practitioners, more than 50% of Korean companies have implemented sustainability management at their respective company systems at medium or high degree.

More than 55% of Korean corporations have implemented sustainability management at a medium or high degree



2.3 Initiators and drivers of corporate sustainability

Research related to corporate sustainability regularly emphasis the importance of management commitment, and - maybe more importantly so – the recognition of the business value of long-term or sustainability thinking on the executive level as the most important single factor for integrating sustainability thinking into management frameworks. This notion is reflected also amongst Korean companies, where the CEO/Executive management is considered the main driving force for sustainability at survey respondent's companies. Contrarily, the importance of the Board of Directors is considered low, reflecting the typical Korean Governance structure which emphasises on strong executive leadership with little or now actual management role assigned to the Board of Directors. However, the sustainability management teams – often located within the strategic planning teams – are also considered as an important driving force, closely followed by social activity or philanthropy management units. There is still some confusion as to the terms and definition related to corporate sustainability (Corporate Social Responsibility, (CSR), Socially responsible company, sustainable company), and due to the lack of a widely agreed definition of “corporate sustainability”, these different terms can signify different things to different people. “Redistribution to the society” and corporate giving have long been part of the Korean businesses, which is reflected in the high importance still attached to corporate philanthropy teams as a driver for corporate sustainability.



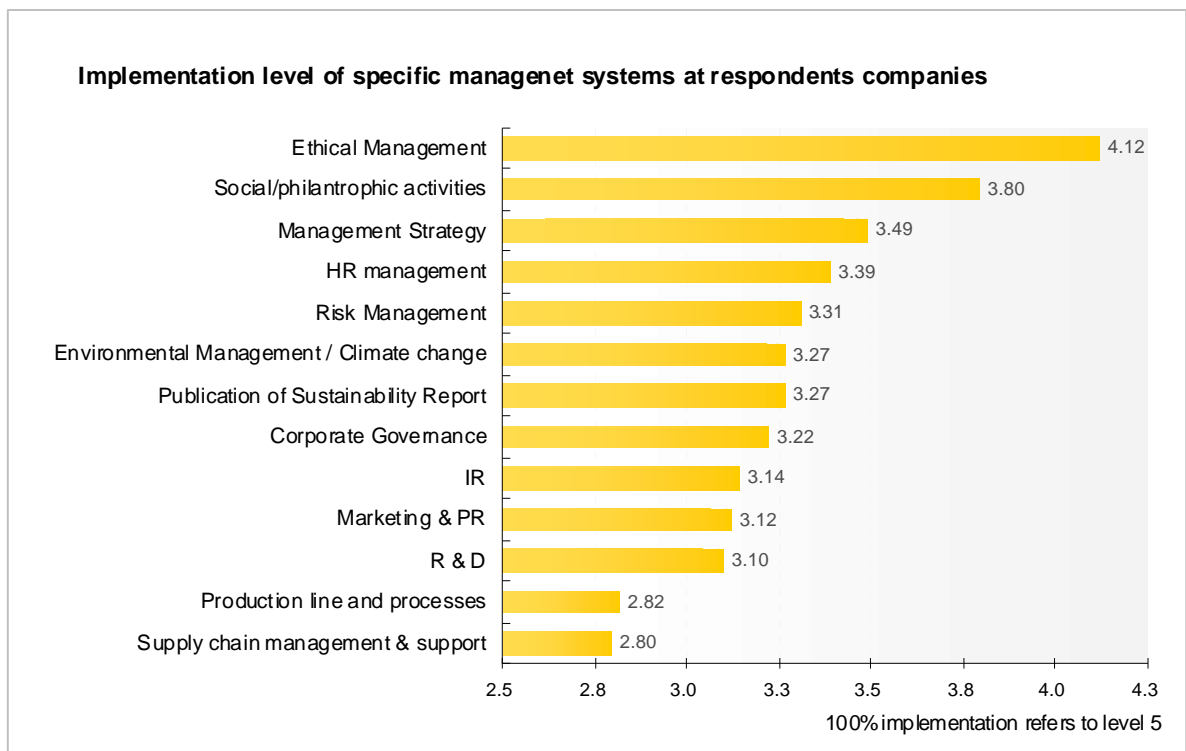
2.4 Current focus of corporate sustainability initiatives

To drill down into the actual implementation and the current level and focus of sustainability initiatives in Korean corporations, respondents were asked as to level of main sustainability-related issues in their respective companies. The answers allow for a set of observations

- Past activities seem to be centred on social and ethical considerations
- Supply chain management – considered a “hot” issue in many companies - is low on agenda amongst Korean companies
- Implementation of systems to reduce GHG emissions and environmental management are currently still at a comparable low level
- Integration into actual production and manufacturing processes is low

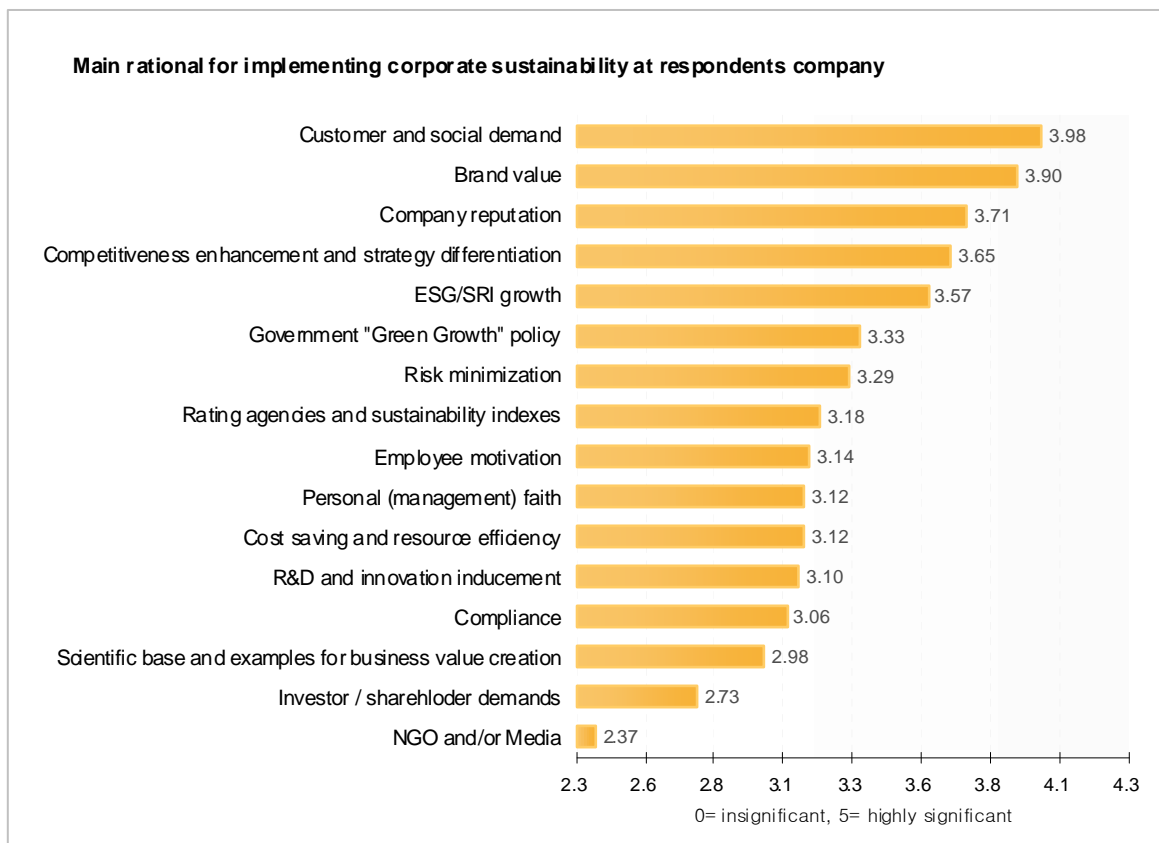
Initial sustainability activities were focused on “social responsibility” activities – indicating the need to integrate and overall strategic approach to sustainability

What is the level of implementation of the following management systems at your company?



2.5 The business case

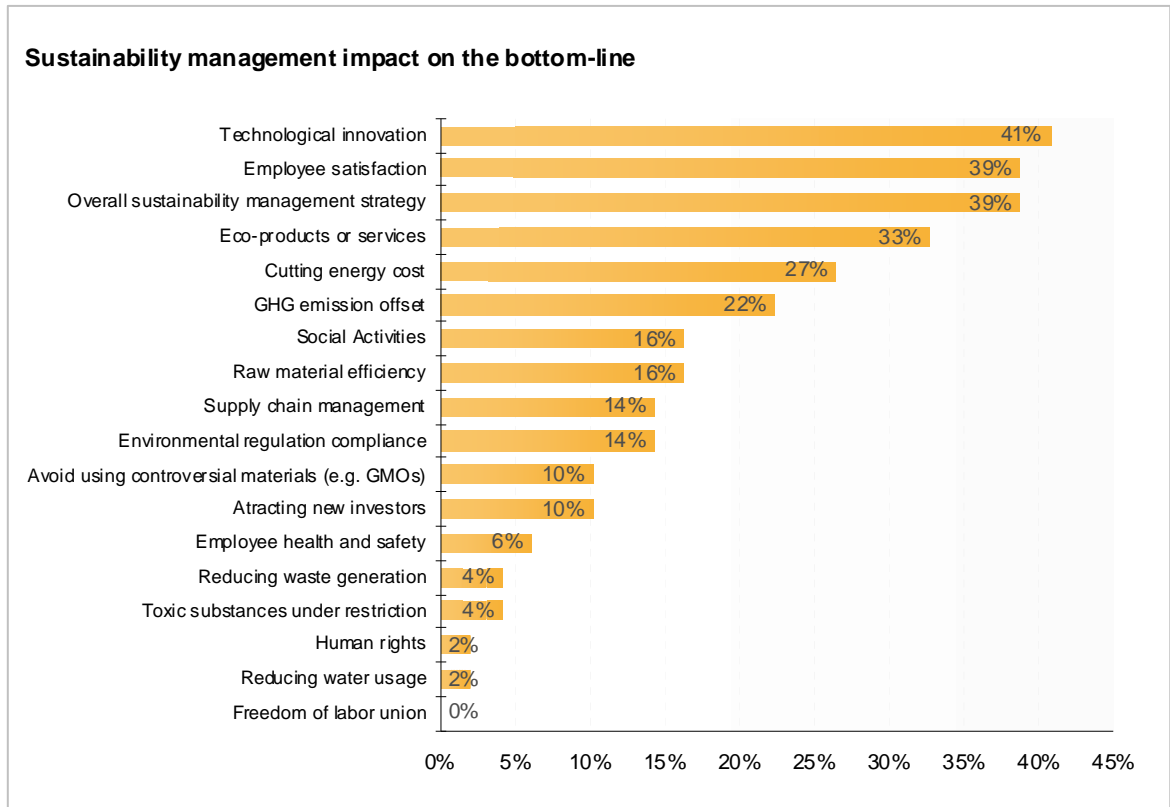
While there is increasing empirical evidence that sustainable companies achieve better financial results, the discussion surrounding business value remains ongoing and sometimes controversial. Of particular interest is therefore the reason for implementing sustainability-related strategies, policies and management systems. The reasons reveal the business value a company attaches to “corporate sustainability”. The survey shows indicates a high value attached to reputation, customer trust and brand value, while the main business value often affiliated with long-term sustainability thinking – risk minimisation, cost savings potential, and strategic product/service development, is still on a relative low level. Interestingly, NGOs and media pressure, who played a substantial initial role in pushing the sustainability agenda during the 1990s across Europe and North America (Brent Spar, Sweat-shop campaigns against Nike and others) seem to have a lower impact in the Korean context.



2.6 Sustainability & profitability

While the previous indicators have revealed, to some extent, an overly strong focus on image and social issues, there are clear expectations for corporate sustainability management to materialise in tangible – ultimately financial – outcomes, both in terms of cost cuttings and increased efficiency, as well as growing revenues and tapping new income streams.

“Which of the following sustainability management issues do you think most affects business success (revenue growth and profitability)?”

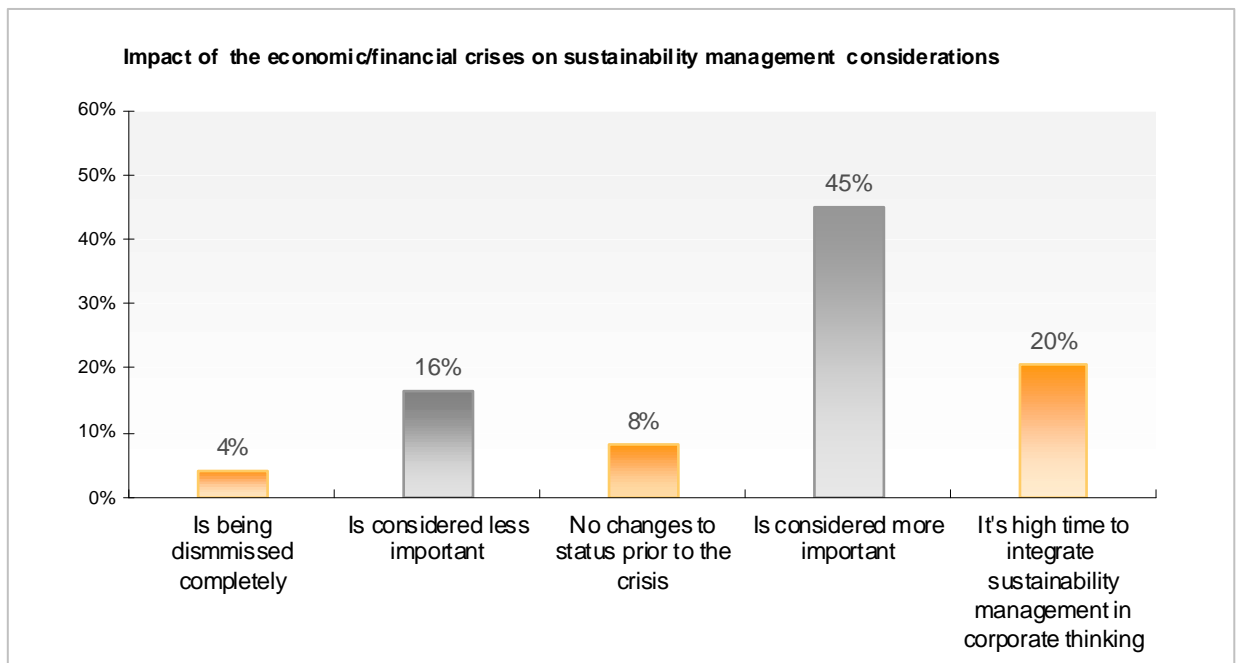


2.7 The economic crisis and sustainability management

It has often been argued in the past that “sustainability management” is a luxury item – in other words, that profitable companies are “doing something” in terms of sustainability, but will concentrate on the “core” financial issues if the financial situation turns bad. The survey reveals the contrary, with 65% of respondents indicating that the crisis has actually highlighted the need for sustainable management thinking and management systems, while only a minority state that sustainability at their respective company has become less important compared to prior to the global financial crisis.

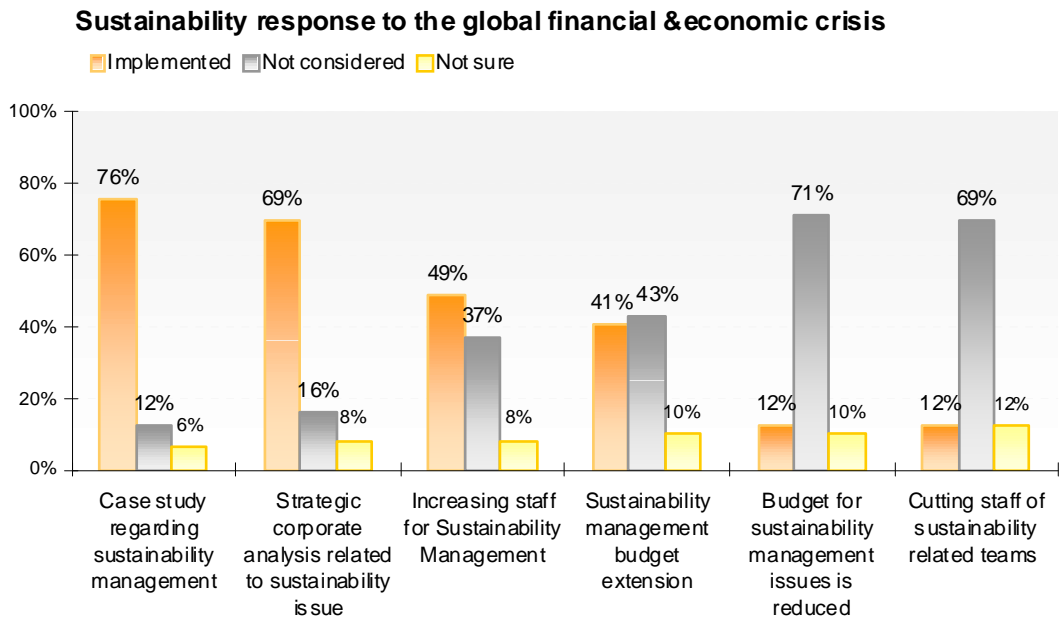
65% of respondents indicate that “sustainability management” has become more important at their company following the financial crisis

What is the status of sustainability management at your company following the global economic crisis?



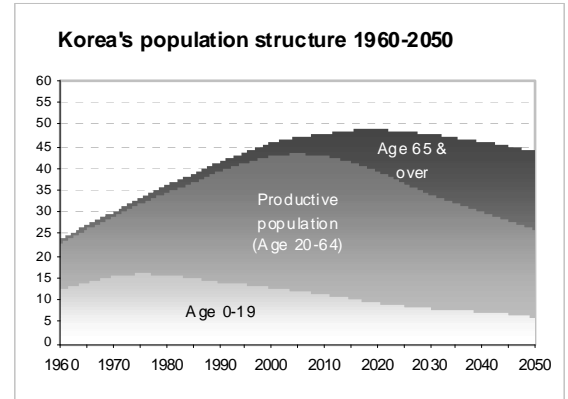
A positive side-effect of the recent global economic crisis seems to be that it opened the eyes of many managers for the business importance of long-term issues, and that business-as-usual scenarios need to be extended. The detailed analysis of Korean corporations' response to the global financial/economic crisis in terms of sustainability shows that most companies, as the very least, are internally analysing "sustainability management issues" related to their company. A considerable number of companies are even considering increasing staff or the budget designated to sustainability management issues.

Following the global economic crisis, is your company implementing any of the following options?



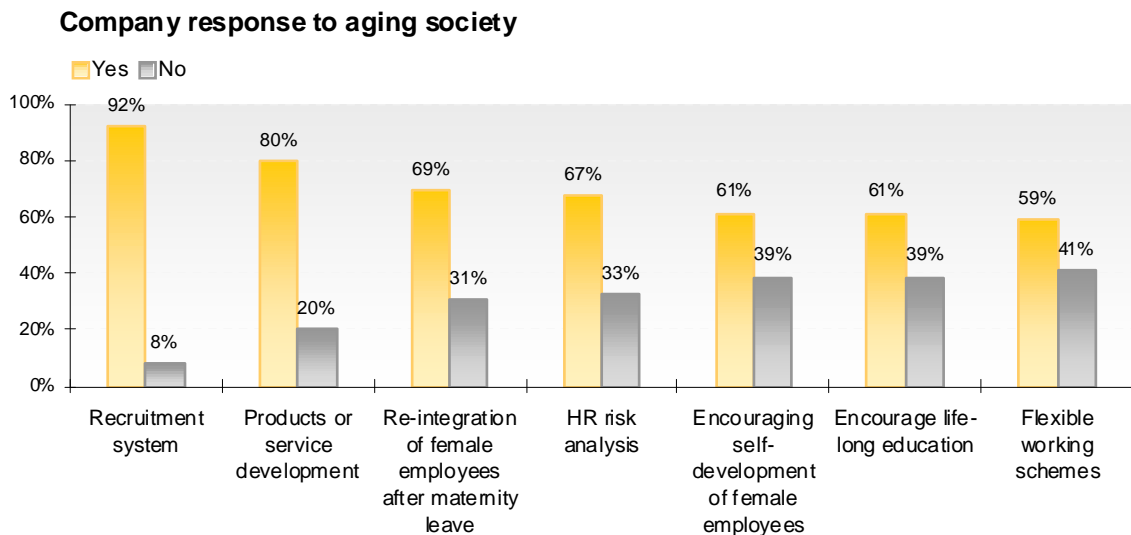
2.8 Response to aging society

Korea's rapid economic development over the last few decades was mirrored in the changes in society. In line with the growth of productivity, industrial output and GDP, the birth rate per woman has declined drastically in a comparable short period of time with the consequences that Korea is not only one of the world's most dynamic economy, but also one of the fastest aging societies. If current trends continue into the future the population will decrease by more than 10% by 2050. More significantly, the percentage of the economically active population will drop considerably, with nearly 40% of the population being more than 65 years old by 2050. Apart from the



consequences for the society and the state in terms of securing the pension system, this has practical implication for the companies: the competition for the best and most talented workforce is bound to intensify in the future – a significant issue in a know-ledge driven economy. In light of these developments, it is necessary that companies are getting prepared for the challenge ahead.

Has the company analysed the following aspects considering demographic trends (aging society)?



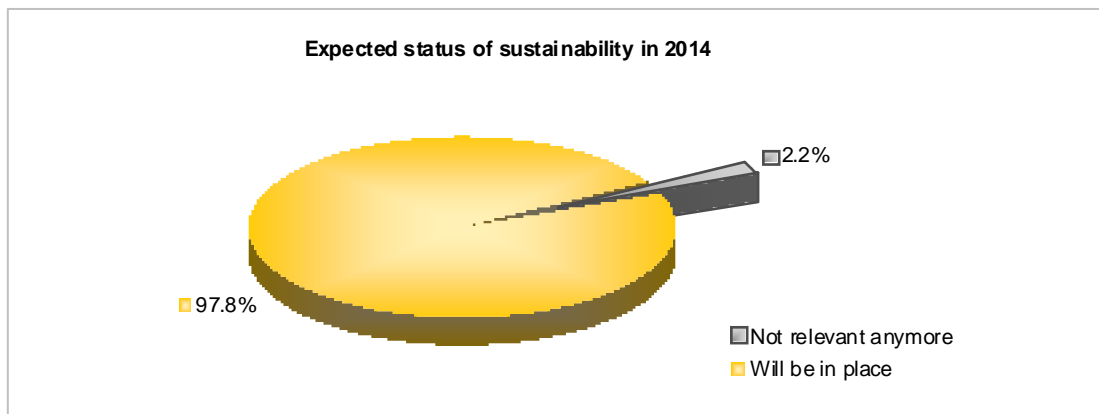
However, it has to be noted that there seems to be a gap between company perception and work reality, particularly in terms of female work-force integration. There is still a distinctive difference of average employment lengths between male and female employees, and working hours in Korean corporations remain the highest in OECD countries.

2.9 The future of corporate sustainability in Korea

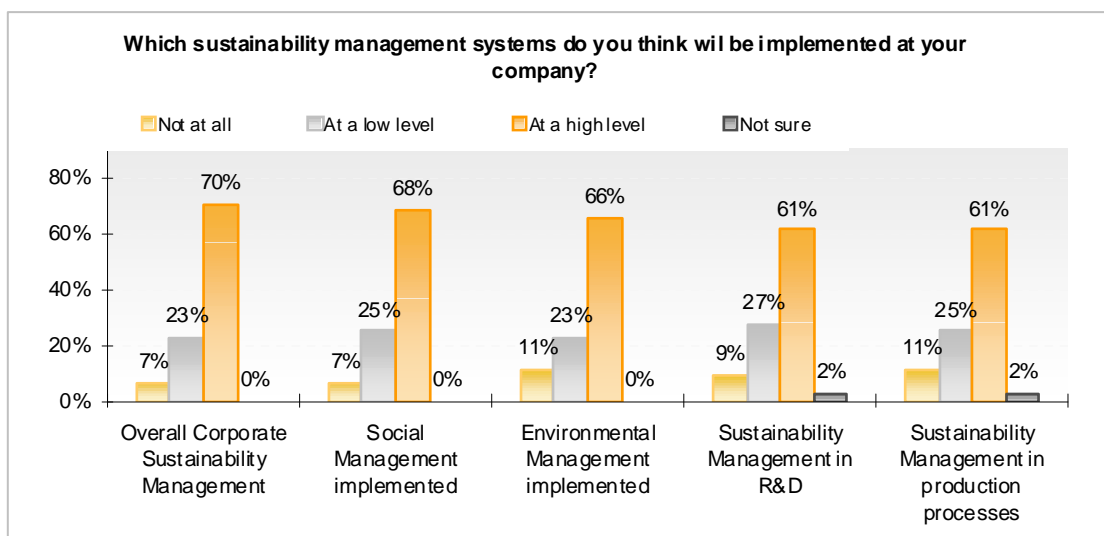
Is “corporate sustainability” only a fashion trend or is it a future business model? In order to get an answer to this old an, in the past, often controversially discussed issue, the survey respondents were asked about their opinion on the trends of sustainability management in their own company. Although there is mounting evidence and examples of the business success of sustainability management, both on a global level and in Korea itself, the outcome to this question is surprising in the level of confirmation for corporate sustainability: 98% of respondents believe that in 5 years time, their company will have implemented sustainability management.

98% of respondents say that their company will have implemented sustainability management by 2014

What will be the status of sustainability management in your company in the year 2014?



How do you think your company will have implemented Sustainability Management in 2014?





2.10 Conclusions

The survey shows that sustainability in the corporate context has evolved from being perceived as a social responsibility into a major management issue amongst many Korean corporations. This development has been driven by a set of factors – the trend at non-Korean globally leading companies, increased knowledge and understanding of “corporate sustainability” and sustainability mega-trends, and most notably, the recent global financial crisis and the emerging opportunity of a “green economy”. A majority of the large Korean companies are now committed to introduce sustainability considerations to some degree. Top-management understanding and commitment is seen as key to implement sustainability frameworks. Without this commitment, the efforts might stay limited to the publication of a sustainability report without the intent or capability to strategically integrate sustainability into the corporate vision.

However, the majority of Korean companies have still some way to go to truly integrate sustainability in the sense that sustainability is not a department or business unit, but a way of management thinking, as the following chapter - an overview of evidence from three years ESG research on Korean companies – will show.



3 ESG research evidence

3.1 Background

SolAbility conducts a yearly sustainability analysis of listed Korean companies according since 2007. The SolAbility ESGS (environment, society, governance, strategy) assessment methodology is based on sustainability mega-trends, global assessment tools, recognised sustainability standards (e.g. GRI G3, Global Compact) adjusted to the specific Korean business culture, regulation and historically grown corporate organisation. The analysis covering a wide range of issues, applying industry-specific criteria and is based on a best-in-class approach.

SolAbility applies a two-step approach filtering out sustainability laggards in a first step performing an in-depth sustainability performance in a second step.

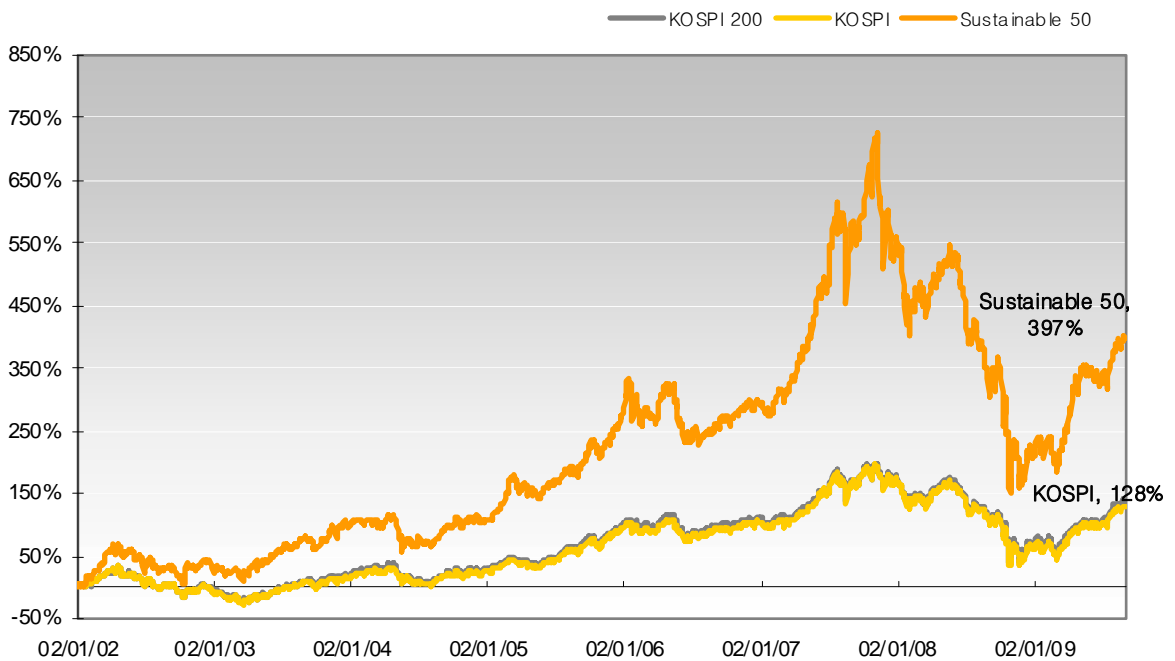
The yearly assessment covers 350 Korean equities, and includes the largest companies from both the KOSPI and the KOSDAQ.



3.2 Korean sustainability leaders – sustainability pays!

The most sustainable companies according SolAbility’s research demonstrate a clear and consistent financial outperformance over time vs. the benchmark of Korean listed companies. Backtracked to 2002, the 50 most sustainable companies have outperformed the KOSPI by more than 250%.

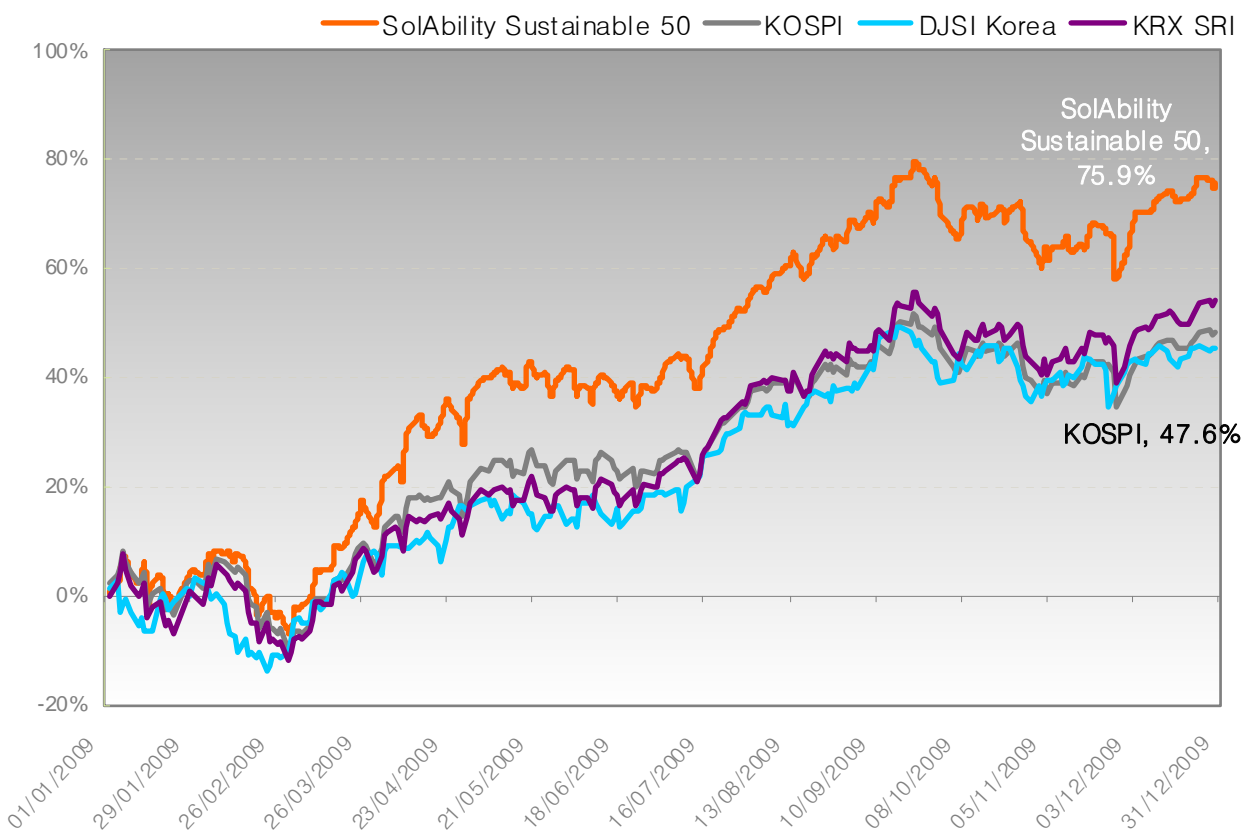
The 50 most sustainable companies vs. Korean Stock Index, 2002-2009





The outperformance of the portfolio of the 50 most sustainable companies is not only achieved through the back-tracking of the portfolio. The shorter-term performance since the first assessment cycle in 2007 and the one-year performance in 2009 equally show a solid outperformance versus less sustainable peer companies. In addition, the results show that sustainable companies bounced back quicker and stronger than non-sustainable companies. The comparison with different sustainability-related indexes (DJSI Korea, KRX SRI) also suggests that the methodology applied to assess sustainability performance does have an impact on the performance. While both the KRX SRI Index and the DJSI Korea Index are assessed using a methodology developed with large, globally active corporations in mind, the SolAbility ESG assessment methodology was developed specifically for Korean-specific characteristics and corporate culture, returning a more accurate result.

SolAbility Sustainable 50 - Performance 2009





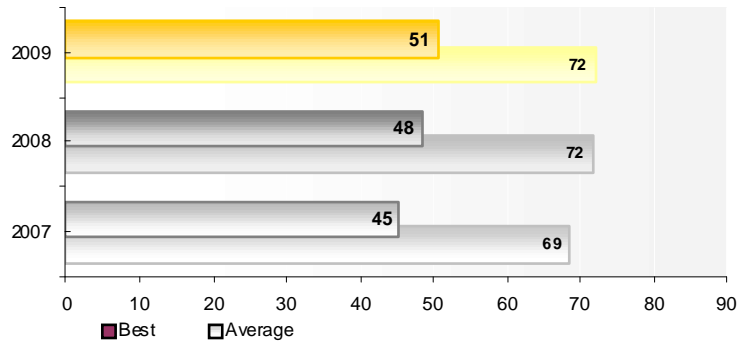
3.3 Development of corporate sustainability levels in Korea 2007-2009

The steady advancement of Sustainability management amongst Korean companies is reflected in the rise of the average sustainability score in SolAbility's yearly ESGS assessment. The average sustainability performance across all sector and industries has increased by a remarkable 13% since the initial assessment in 2007.

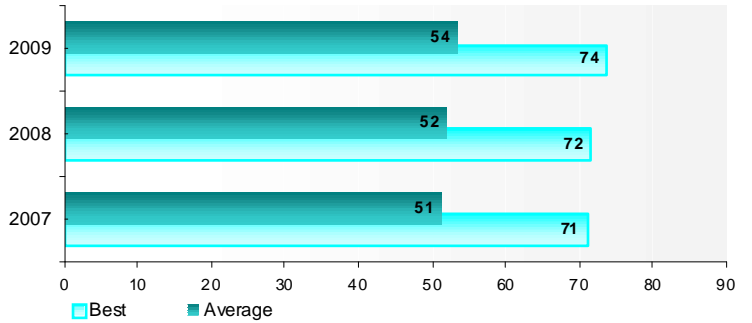
It is interesting to note that while the average performance of the assessed companies has risen substantially in most categories, the increase at the best performing companies has been less significant, indicating a somewhat stagnant performance at companies that already have implemented sustainability management practices

The performance in environmental criteria is lower compared to economic and societal (or human and society related) criteria - despite a very large number of Korean companies having obtained ISO 14001 certification for their environmental management systems, indicating a compliance-driven approach towards environmental issue in the past.

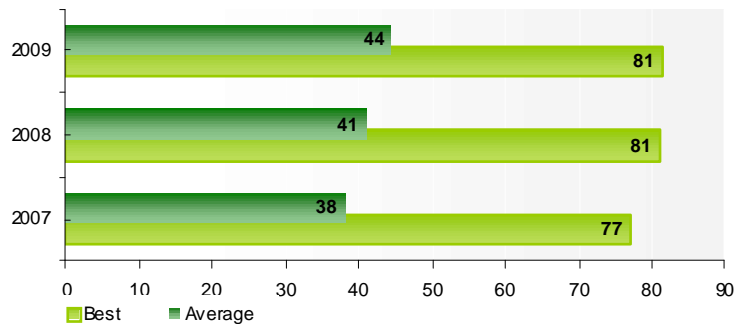
Overall Sustainability Performance 2007-2009



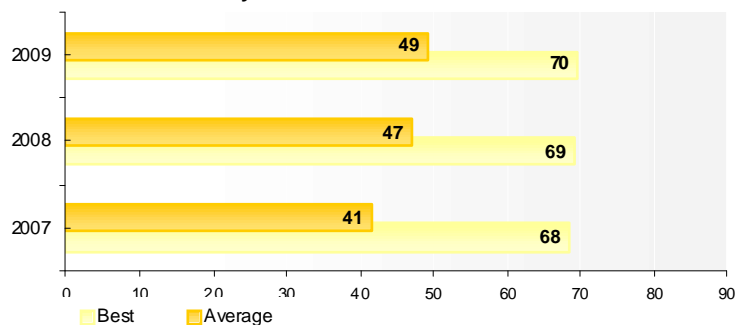
Economic Sustainability Performance



Environmental Sustainability Performance

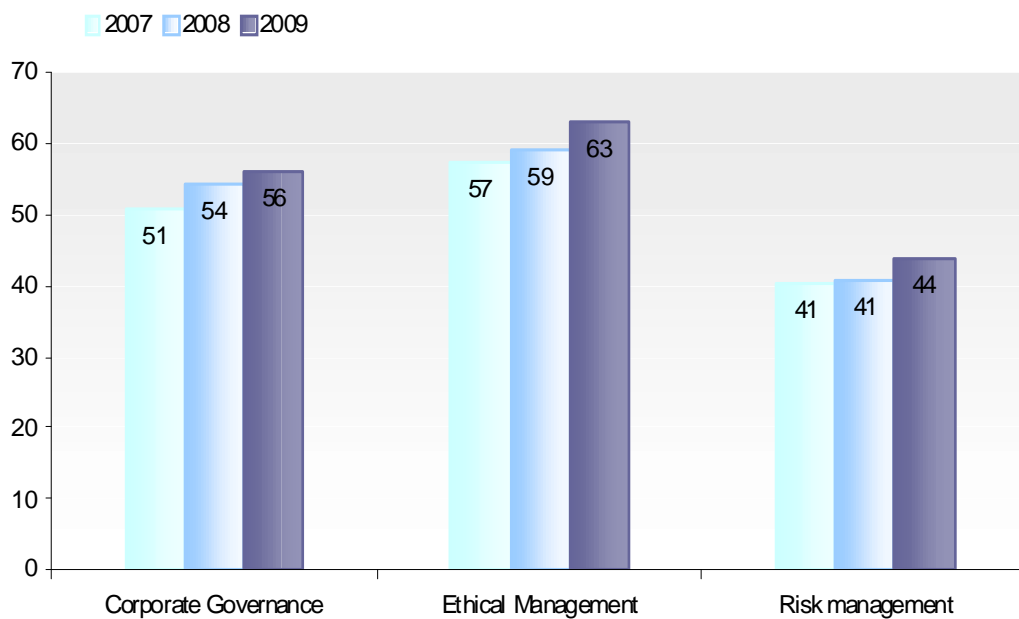


Societal Sustainability Performance



3.4 Development of selected sustainability themes – economic criteria

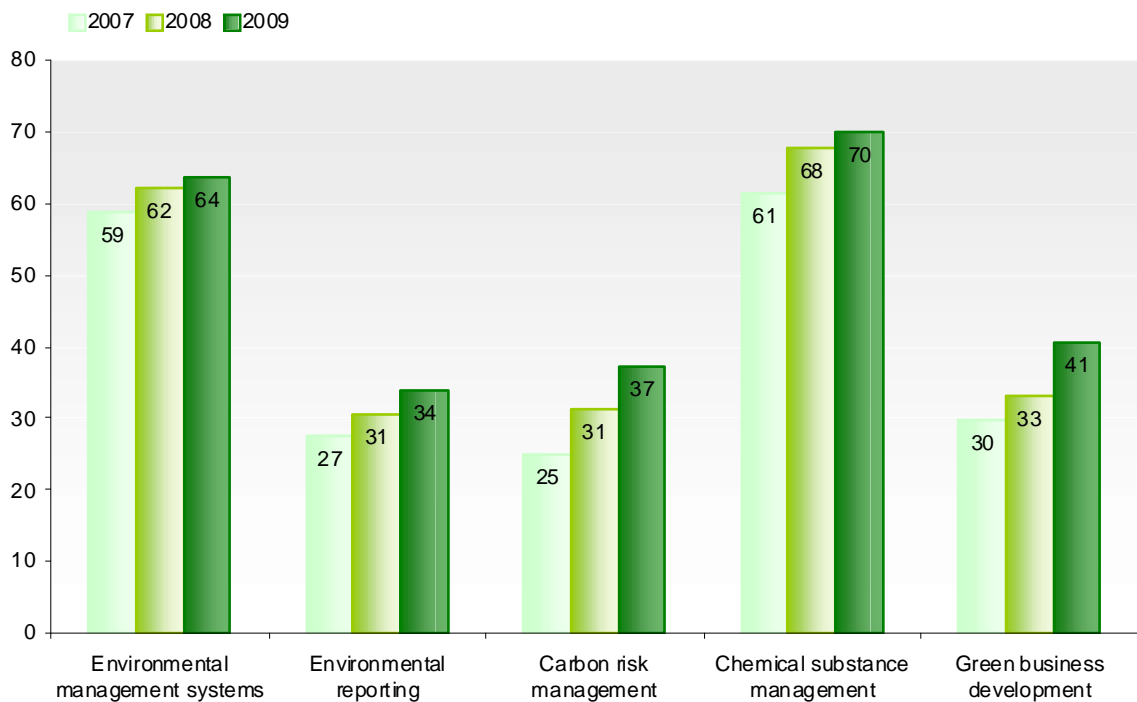
Comparable good average performance in Corporate Governance and Ethical Management reflect the focus in terms of sustainability on policies rather than strategic direction in the Korean corporate environment in the recent past – in particular on ethical business conduct activities, with all major companies having highly developed ethical management systems. While the Korean legislation requires minimal Governance standards and all companies having introduced a formal governance systems with a Board of Director, the functionality of the Board remains rather formal than being a true and independent supervisory body for the executive management, explaining the comparable low average in Corporate Governance scores.



However, more advanced management systems management are still on a lower level, with only a few companies having - for example - fully implemented corporate-wide risk management systems that go beyond standard financial risk management such as hedging strategies for fluctuations in interest rates or currency exchange values.

3.5 Development of selected sustainability themes – environmental

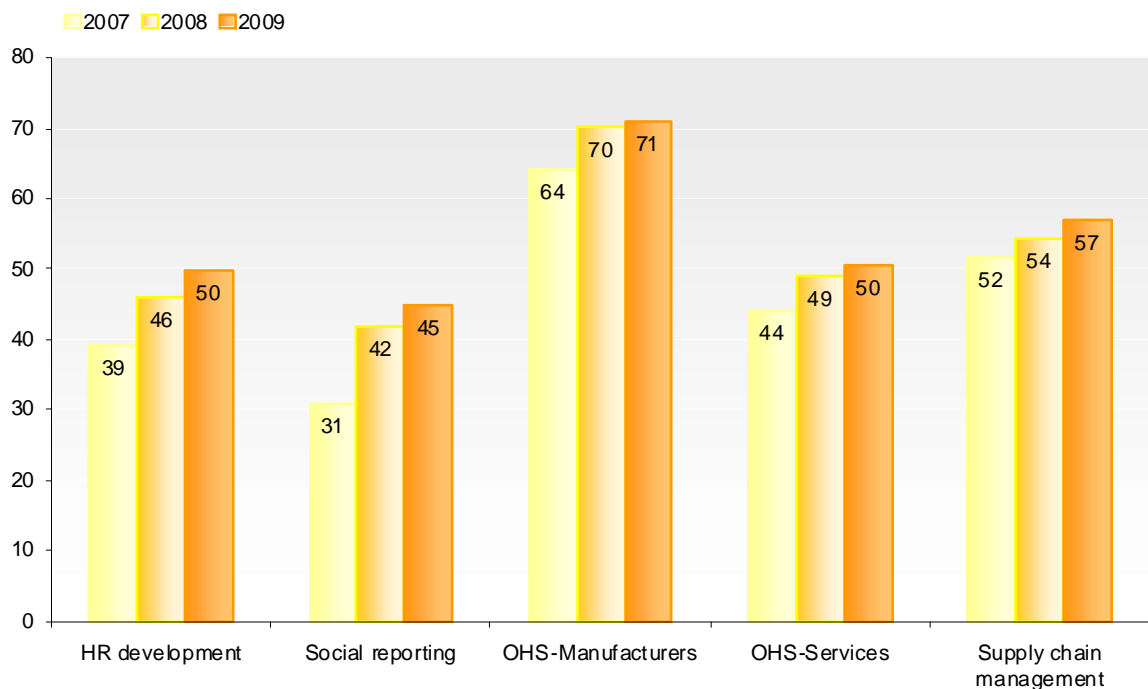
Korean companies score high in terms of formal implementation of environmental management systems (ISO 14001). However, a certified management system is neither guarantee nor a replacement for thorough environmental analysis and management. In terms of advanced environmental management systems or strategic business development, Korean companies lag behind global best practice.



However, in 2009 has seen a shift in management perception with a large number of companies making significant investment in GHG management systems, reduction programs and “green business strategies”. It is therefore expected that the relevant levels will catch up with international standards shortly.

3.6 Development of selected sustainability themes – social

The Korean corporate culture has seen a modernisation of management policies and systems on a range of issues over recent years. While classical “social” issues have been addressed for quite some time, such as safety at the workplace – reflected in high average scores and low relative improvement – other issues have been coming to the forefront and are being addressed at many companies. Modern HR training systems have been implemented, and incentive schemes introduced at a number of companies. The highest relative increase is observed on reporting related to social issues, marking a shift in external communication focussing on the social activities (citizenship) to a wider view on social issues, including stakeholder surveys, employee management systems, and supply chain management programs.

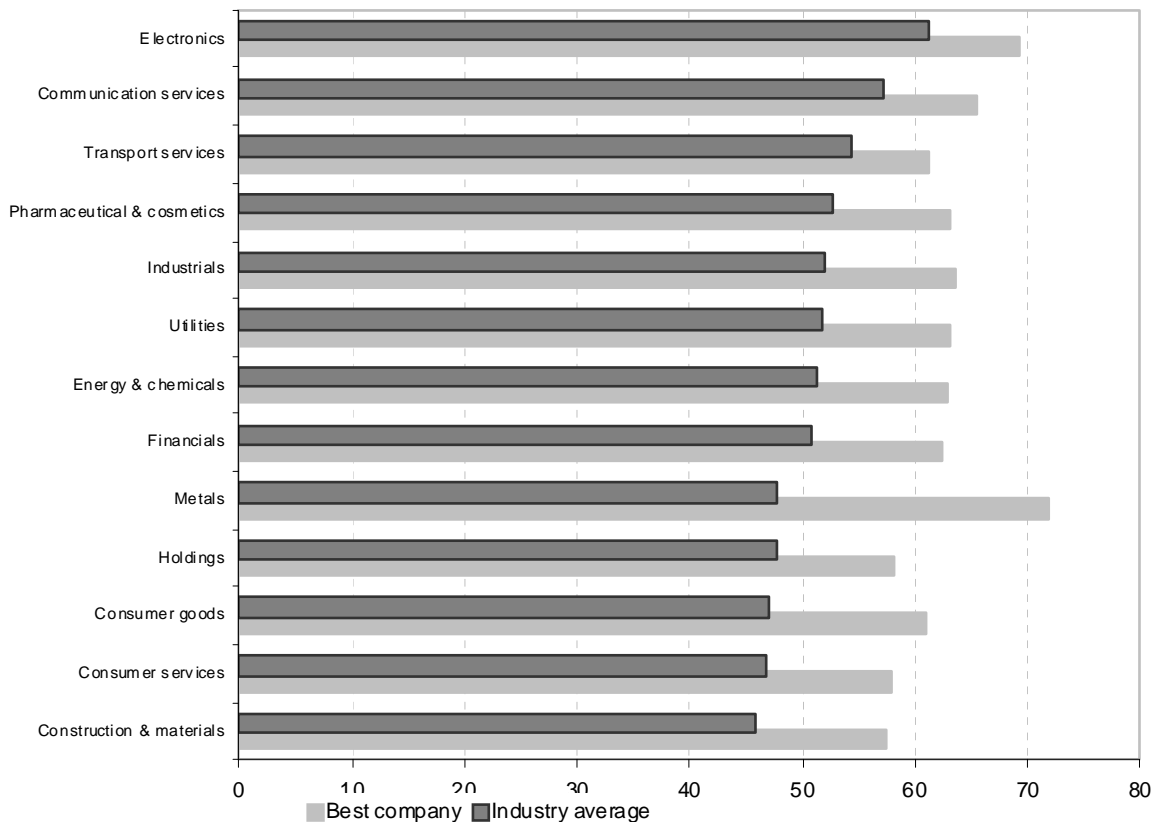




3.7 Sustainability performance in different industry sectors

Analysing the data by sector reveals some interesting details. The large conglomerations focused on exports to the global and advanced markets have been exposed at an earlier stage and to a deeper extend to sustainability related issues, and it is therefore probably no surprising that sustainability performance tends to be more advanced in industry sectors where Korean companies have achieved a globally leading position, in particular in the electronics industry with its global presence. Industries and sectors that mostly cater for the domestic market (metal producers, consumer services and food producers) and needs tend to have a lower sustainability implementation level at this point in time.

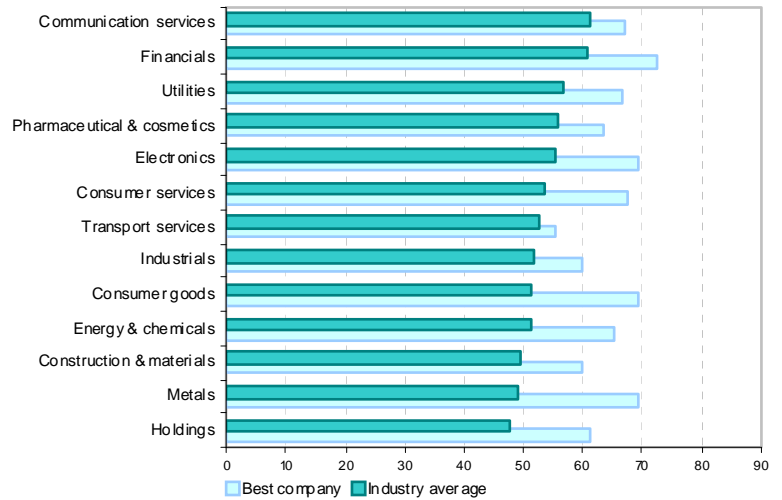
Average sustainability performance across industry sectors



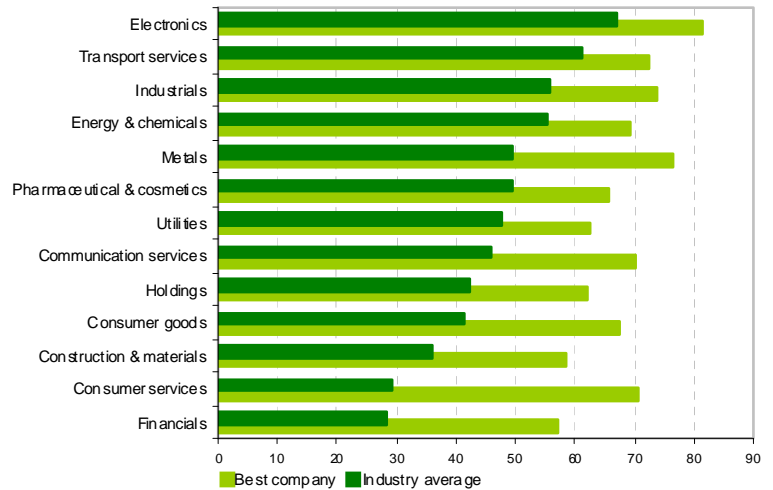
Economic criteria performance (governance, corporate ethics, risk management, customer satisfaction, etc. plus industry specific criteria) is highest amongst service providers and companies who due to the nature of their business have to deal with some levels of risk management.

The sectors with highest global exposure and the highest operational exposure have the highest environmental management and performance levels: the electronic companies, and other high-impact industry sectors

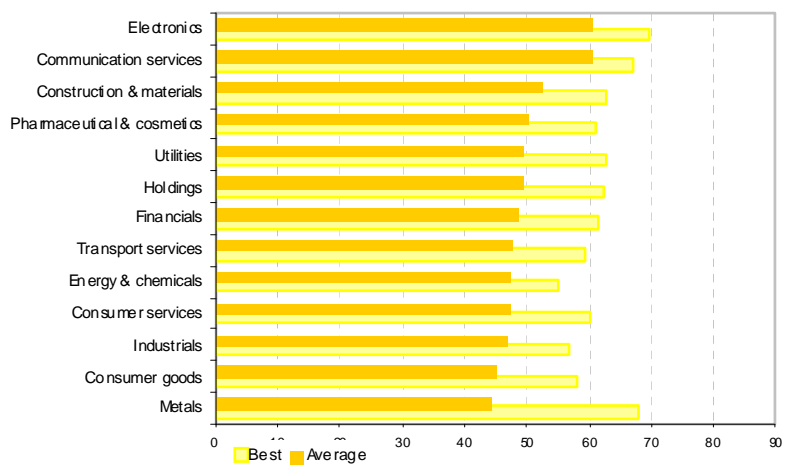
Economic performance across industry sectors



Environmental performance across industry sectors



Society & human criteria performance across industry sectors





Value Creation

SolAbility is a Korean-Swiss joint-venture based in Korea, providing ESG research to institutional clients and sustainability services to corporate clients.

www.solability.com

contact@solability.com

Tel. +82 31 811 3578

© SolAbility. All rights reserved.

Reproduction permitted with citation of source

December 2009



Value Creation

_sustainability_pays.

www.solability.com