





#### Allergan, Inc.

## **David Pyott,**Chairman, President and CEC

"For over 60 years, Allergan has been committed to the health, safety, and well-being of the people who put their trust in our products.

Every day, we strive to better people's lives in a wide range of ways — from developing new treatments for complex and disabling medical conditions to offering science-based medical aesthetic solutions. Our determination to make a positive contribution extends to not only the people who benefit from our products, but also to our employees and to the global community in which we live and work. It remains our goal to ensure that our contribution to science reflects our commitment to safe, healthful workplaces, strong communities and responsible, ethical business practices in everything we do, from research and development to sales and marketing. Allergan is committed to sustainable development and appreciates the opportunity to match our sustainable programs against the best in our industry as well as best-in-class. This gives us the opportunity

#### PepsiCo

#### **Indra K. Nooyi**, Chairman and CEO

"PepsiCo is proud to be the DJSI Food and Beverage
Supersector leader. The SAM Assessment helps us track
progress against our Performance with Purpose mission, which is to
deliver sustainable growth by investing in a healthier future for people and
our planet. We believe that our long-term profitable growth is intrinsically
linked to our ability to meet our social and environmental objectives. For
example, reducing our water and energy consumption generates cost
savings, and implementing sustainable agriculture models lowers supply
chain risks and costs. PepsiCo's participation in the Assessment helps
us identify and address emerging sustainability issues
and enhances our ability to do business
responsibly in the communities
where we operate."

#### **Foreword**

#### DEAR READER.

It has been 25 years since the publication of The Brundtland Commission's groundbreaking report *Our Common Future*, defining the now familiar concept of sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

Since then, as evidenced by the steady increase in participation rates in the annual SAM Corporate Sustainability Assessment (CSA), companies have come a long way in recognizing the financial benefits of embracing sustainability as a core component of their corporate strategies. Yet, continued economic uncertainty caused by the ongoing financial crisis points to the need for a renewed emphasis on long-term thinking and a shift away from short-sighted behavior. We remain convinced that a long-term focus and sound management—hallmarks of companies that excel in sustainability performance—will prepare them to better weather turbulent economic environments such as the one we face today, giving them a competitive advantage.

The 2012 edition of The Sustainability Yearbook marks the beginning of a global alliance between SAM and KPMG, aimed at helping companies measure and enhance their corporate sustainability performance. To kick off this collaboration, this year's publication offers four perspectives on current sustainability topics.

First, KPMG examines why sustainability has become increasingly important to governments and companies in some of the world's fastest growing economies. The emerging markets now stand at a crossroads in which they must decide whether they wish to emulate a century-old Western model for development, or whether they prefer to chart a more sustainable course to prosperity.

But a sustainable path to development that limits the negative impact on the environment and future generations requires innovative solutions. Sustainability considerations have continuously helped spark new ideas, which is why innovation management is an important component of the CSA. Therefore, in the second chapter of The Sustainability Yearbook, SAM highlights some preliminary findings from its evaluation of companies' approach to innovation management.

As an innovation-driven industry, the chemical sector began addressing sustainability concerns as early as the mid-1980's and has made great strides since then. Based on data collected through the CSA, SAM also explores which sustainability factors distinguish the leaders from the laggards in the chemical industry.

Finally, Frans van Houten, President and Chief Executive Officer at Royal Philips Electronics explains how innovation and sustainability play an integral role in advancing his company's mission of touching as many lives as possible with its green and social breakthroughs.

As always, The Sustainability Yearbook provides insights into the 58 sectors examined by the 13th SAM Corporate Sustainability Assessment, which determines the companies that are included in this reference guide to the world's sustainability leaders. The leading companies in 58 sectors are classified into three categories—SAM Gold Class, SAM Silver Class and SAM Bronze Class—with special status awarded to Sector Leaders and Sector Movers.

We hope you find The Sustainability Yearbook a useful tool that provides fresh insights into one of the major trends of our time, and which has been continuously evolving over the last 25 years.

M. Balely

**Michael Baldinger** Chief Executive Officer SAM





Ted Senko

**Ted Senko**Global CEO
KPMG Climate Change &
Sustainability Services

#### Repsol YPF, S.A.

#### Antonio Brufau, Chairman and CEO

"Society's expectations with regard to a company's contribution to sustainable development have grown considerably. In order to meet humanity's long-term welfare and development needs, we must ensure that our global economy shifts towards a more intelligent global energy model that is universally accessible and compatible with the climatic stability of the planet. This, in turn, requires the smart and sustainable management of our water, energy and land resources.

As an energy company, we recognize the need to understand and share the concerns of this increasingly interconnected global society. This means opening ourselves to public scrutiny, being transparent, respecting human rights and fighting corruption. Thus engaging in dialogue with civil society and participating in initiatives such as the SAM Corporate Sustainability Assessment are not only an effective risk management tool, but are above all, a way to create partnerships and identify opportunities to ensure that we continue to move towards developing sustainable energy solutions."

## Alcoa Inc. Klaus Kleinfeld, Chairman and CEO

"Sustainability drives everything we do at Alcoa, from how we manufacture our products, to the way our employees interact with the environment. At our core, the very metal we make is uniquely sustainable. Aluminum is light, strong, non-corrosive and infinitely recyclable, and Alcoa's innovative material solutions are making cars, trucks and planes lighter and more fuel-efficient, buildings environmentally friendly, packaging greener, and consumer electronics cooler. Every day we live our values of accountability and responsibility, and continually seek to improve our industry-leading practices in safety, natural resource management, emissions reduction

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#### Cemig

#### Djalma Bastos de Morais, CEO

"The importance of sustainability to Cemig can be seen in the fact that sustainability is embedded in its business strategies. Sustainability is an integral part of the company's vision for the future, of its strategic planning, of its decisions regarding the acquisition of new assets, of its Declaration of Ethical Principles and of all Cemig's attitudes and activities.

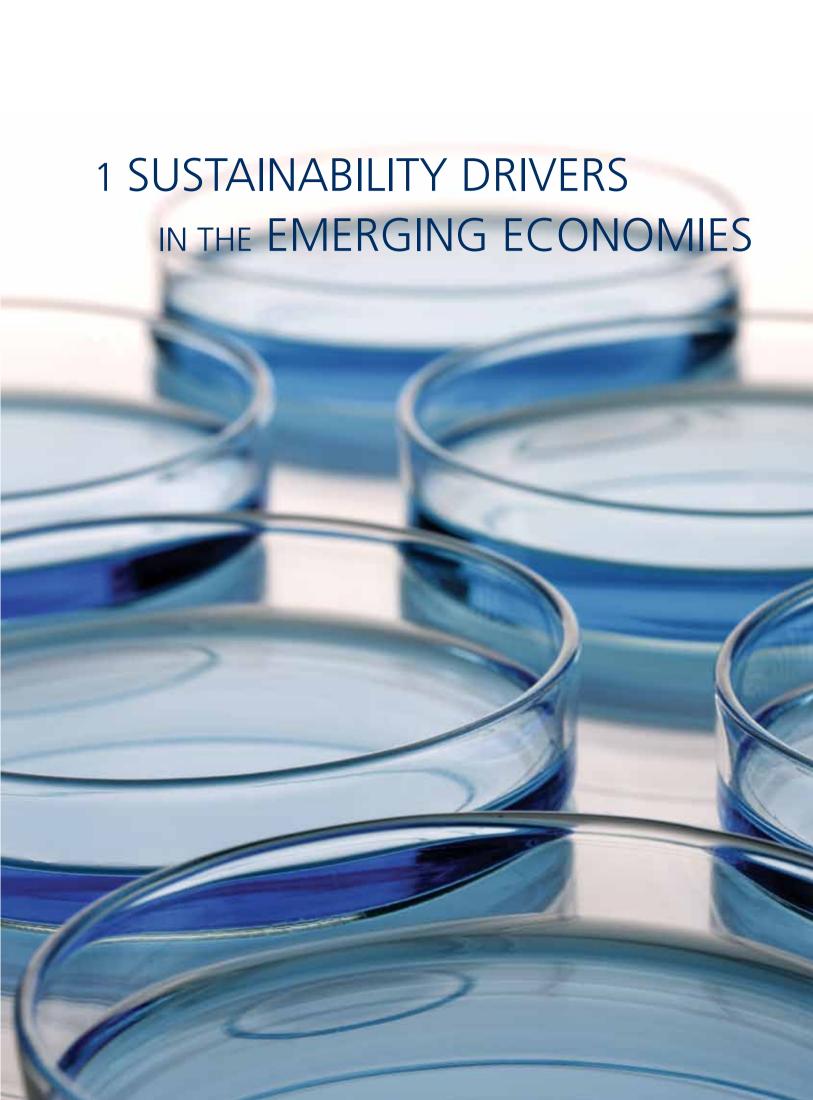
Being listed in the DJSI World all these years means recognition by the international market of the set of strategic actions adopted by Cemig that aim at fostering new businesses, working in the interest of investors and improving corporate sustainability practices. The annual assessment by SAM provides us with the necessary benchmarking to review and improve our programs and processes in a continuous quest for sustainability-oriented improvements that ensure the company's performance in the three dimensions:

economic, environmental and social."

#### Capital Shopping Centres Group PLC

## Alexander Nicoll, Director of Corporate Responsibility

"Capital Shopping Centres Group PLC is the leading specialist developer, owner and manager of pre-eminent UK regional shopping centers. We are committed to working closely with the communities served by our businesses and operating responsibly in terms of care for the environment, reduction in energy consumption and promotion of increased recycling of waste. Benchmarking against best practice as signposted by SAM's Corporate Sustainability Assessment ensures that we remain focused on current thinking about corporate sustainability issues and such engagement supports our drive to improve the sustainability of all aspects of our business year on year for the benefit of our investors, customers and employees."



#### 1. Sustainability Drivers in the Emerging Economies

While the definition of the world's emerging markets has varied over the years, it is clear that the rate at which they continue to grow is striking. According to The Economist and the IMF, the emerging economies have either overtaken or will overtake the developed economies anywhere between 2008 and 2012<sup>1, 2</sup>. According to the IMF, they already accounted for nearly half of global growth in 2008<sup>3</sup>.

Emerging economies accounted for nearly half the world's exports in 2010 according to the WTO and it looks certain they will account for much of the expected global growth in years to come<sup>4</sup>. According to The Economist, "Western multinationals expect to find 70% of their future growth in the emerging economies, 40% of it in China and India alone." <sup>5</sup>

They will not find these markets uncontested, however. A new breed of nimble multinationals is evolving from within the emerging economies. These new players are spotting new markets and innovating new business models, services and products to serve the diverse needs of a rapidly emerging global middle class.

At the same time as the emerging economies continue to improve their competitive position, some are also catching up fast with the developed economies in terms of their approach to sustainability. They have come a long way in a short space of time and are increasingly aware of the negative as well as the positive impacts of rapid economic development and industrialization.

Many of the economies discussed in this article also find themselves confronted with sustainability issues as they bump up against pressing resource constraints, such as water scarcity in South Africa or a reliance on polluting energy sources in China. As these economies mesh ever more deeply into the wider global economy, their leading businesses feel more pressure from overseas investors and

partner companies to grow sustainably. Legislation is also driving the move towards sustainability in every economy cited in this article, a trend being driven in part by the growing concerns of many of these nations' emerging middle class and by more active and engaged local communities eager to pressure companies to act more sustainably.

The impetus to address sustainability is not coming solely from external pressures but also from an increasing, although by no means universal, awareness that sustainability can also offer opportunity. In the countries which form the focus of this article—Brazil, China, India, Russia and South Africa—increasing numbers of organizations are now citing the chance to limit reputational risk and enhance brand value as reasons for engaging more deeply with sustainability issues.

But companies in many emerging economies still lag behind their developed economy peers. Opinions expressed by KPMG experts based in these countries suggest relatively few organizations in the emerging economies recognize that there could be economic value in making sustainability an integral part of corporate strategy. Few as yet see a clear link between sustainability and long-term profitability. It is apparent, however, that in most emerging economies, sustainability as an issue has taken root, many companies recognize the benefits of addressing the topic and its importance is set to grow.

<sup>1</sup> IMF, World Economic Outlook,

<sup>2</sup> http://www.economist.com/ node/21525373

<sup>3</sup> http://www.iadb.org/intal/ intalcdi/PE/2011/08815.pdf

<sup>4</sup> http://www.wto.org/english/ news\_e/pres11\_e/pr628\_e.htm

<sup>5</sup> http://hbr.org/2011/01/newbusiness-models-in-emergingmarkets/ar/1

#### FIGURE 1: COUNTRY RANK OVERVIEW

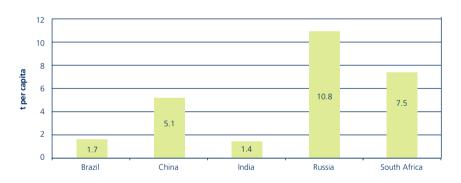
Source: World Development Indicators database, World Bank, 1 July 2011.

The Global Competitiveness Index 2011-2012 rankings, World Economic Forum. Human Development Report 2011, United Nations Development Programme.

	GDP RANKING 2010	GLOBAL COMPETITIVENESS INDEX RANK 2011-2012 <sup>6</sup>	UN HUMAN DEVELOPMENT INDEX RANK 2011 <sup>7</sup>
Brazil	7	53	84
China	2	26	101
India	9	56	134
Russia	11	66	66
South Africa	28	50	123

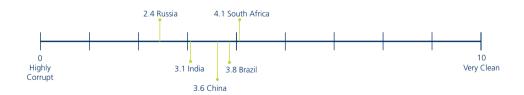
#### FIGURE 2: CO<sub>2</sub> EMISSIONS PER CAPITA 2009 (T PER CAPITA)

Source: CO<sub>2</sub> Emissions from fuel combustion 2011: International Energy Agency



#### FIGURE 3: CORRUPTION PERCEPTIONS INDEX 20118

Source: Corruption Perceptions Index 2011: Transparency International



- <sup>6</sup> Global Competitiveness Index 2011-2012 ranking: The Global Competitiveness Index provides a benchmark of the many factors that underpin national competitiveness. Competitiveness is defined as the set of institutions, policies, and factors that determine the level of productivity of a country.
- <sup>7</sup> Rank in the UN Human Development Index: a measure of a country's achievements based on economic, health and social indicators, using measures such a GDP per capita, life expectancy, education and literacy rates.
- <sup>8</sup> Corruption Perceptions Index 2011: The Corruption Perceptions Index (CPI) ranks countries according to the perception of corruption in the public sector. The CPI is an aggregate indicator that combines different sources of information about corruption, making it possible to compare countries.

#### 1.1 BRAZIL

GDP Ranking 2010	7 <sup>th</sup>
Global Competitiveness Index Rank 2011-2012	53 <sup>rd</sup>
UN Human Development Index Rank 2011	84 <sup>th</sup>
CO <sub>2</sub> Emissions per capita 2009 (t per capita)	1.7
Corruption Perceptions Index Rank 2011	73 <sup>rd</sup>

A paragon for the global economy, Brazil is fast making the transition from a regional to global power thanks to its consistently solid economic performance, including growth in 2010 of 7.5%. Its economy is already the world's seventh-largest by GDP and is expected to take fifth place in coming years.<sup>9</sup>

Strong export growth and inward investment together with extensive social programs have helped lift millions of Brazilians out of poverty. A majority of Brazilians are now middle-class, and domestic consumption has become an important growth driver. Brazil's engagement in the global economy is a significant factor in driving its sustainability agenda. Brazilian companies export high quantities of commodities such as minerals, oil and gas and agriculture products to European and Asian companies, many of which request disclosure of environmental, social and governance (ESG) information.<sup>10</sup>

According to KPMG's International Survey of Corporate Responsibility Reporting 2011 (KPMG CR Report 2011), 88 of Brazil's 100 largest companies report on corporate responsibility performance in the public domain. The chance to protect corporate reputation and enhance brand value as well as economic considerations such as cost savings are

the major reasons cited for this extensive level of reporting.

Investors are also driving the sustainability agenda. Before they invest, foreign investors (including pension funds, private funds, private equities and general investors) are increasingly looking for effective corporate governance as well as structures for addressing social and environmental responsibilities. BOVESPA (the Brazilian Stock Exchange) already has a Corporate Sustainability index.

Regulatory pressures, such as the recent solid residues law, passed in 2010, which establishes corporate responsibility for handling waste, pollution and emissions, are also playing their part. Under this law, certain environmental impacts could make companies and their respective managements guilty of a criminal offense. Media scrutiny and public concerns about health, safety, sweatshops, excessive working hours, local community conditions and sexual and moral harassment are also helping drive greater corporate sustainability efforts.

As a consequence of these factors, many Brazilian companies are bringing sustainability issues and regulations to their boards of directors and requiring management to address them in the company's risk management priorities.

The Rio+20 event in 2012, to be held in Rio de Janeiro to mark the 20th anniversary of the 1992 United Nations Conference on Environment and Development (UNCED) will serve as an important forum to further develop and build on Brazil's path to greater business sustainability.

<sup>9</sup> Goldman Sachs, Global Economics Paper No. 153, 2007

10 http://www.state.gov/r/pa/ei/bgn/35640.htm

#### 1.2 CHINA

GDP Ranking 2010	2 <sup>nd</sup>
Global Competitiveness Index Rank 2011-2012	26 <sup>th</sup>
UN Human Development Index Rank 2011	101st
CO <sub>2</sub> Emissions per capita 2009 (t per capita)	5.1
Corruption Perceptions Index Rank 2011	75 <sup>th</sup>

Laying claim since 2010 to the title of the world's second-largest economy and its fastest growing major economy, China has achieved annual growth rates of almost 10% over the last three decades. 11, 12 China could become the world's largest economy (by nominal GDP) as early as 2020, according to Standard Chartered, and it is already the world's largest exporter and second-largest importer of goods. 13, 14

China's vigorous economic growth has also brought with it rapid social change and environmental degradation. Environmental problems, such as polluting energy sources and the effects of urban development on the availability of land for agriculture, are starting to create potential bottlenecks to growth.

The Chinese public also has more explicit expectations about quality of life, income disparities and wealth distribution. Owing to increasing activism on a community level there is a growing focus on how organizations can improve their working environments and on how industrial operations can improve their environmental performance.

How investors in China approach the sustainability trend is important. They may be best served by constructing an investment thesis around macroeconomic themes such as water risk, energy security, wage pressures, labor productivity and pollution liabilities, issues that are directly impacting companies, rather than merely looking to back "responsible," "ethical" or "socially oriented" companies.

Responsible investment as a formal discipline in China is still an emerging field. A small number of sustainability-related index products or funds have emerged in recent years developed by institutions ranging from private asset managers to the Shanghai Stock Exchange (SSE). An example is the Sustainable Development Industry Index launched in 2011. However, there is not yet a significant community of asset owners or managers with an explicit focus on sustainability issues.

Despite the relatively slow growth in the investment sector, however, the Chinese corporate sector has moved rapidly over the last five years to adopt an increasingly systematic approach to sustainability. This growing corporate focus has been driven by and also contributed to a rapid increase in the degree of transparency by Chinese companies. More than 700 Chinese companies now issue sustainability reports and, according to the KPMG CR Report 2011, 50 of China's 100 largest companies do so.

Both the Shanghai and Shenzhen stock exchanges encourage sustainability reporting, and the government has asked all state-owned enterprises under SASAC (State-owned Assets Supervision and Administration Commission) to issue a report and establish a CSR department. The SASAC's current five-year plan also includes several environmental targets focused around energy intensity, carbon intensity, water efficiency, and several specific pollutants alongside economic growth goals.

China's banks will have a significant role to play in promoting sustainability. The Chinese Banking Regulatory Commission has been promoting green credit policies to accompany the government's industrial restructuring priorities. The Commission is encouraging banks to steer capital away from energy-intensive, high-polluting, and over-capacity sectors and towards "strategic industries" including alternative-fuel cars, environmental and energy-

<sup>&</sup>lt;sup>11</sup> IMF, World Economic Outlook, 2011

<sup>&</sup>lt;sup>12</sup> http://www.bloomberg.com/ news/2011-05-26/china-topsindia-as-asian-country-mostlikely-to-maintain-economicgrowth.html

<sup>&</sup>lt;sup>13</sup> http://www.economist.com/ node/17733177

https://www.cia.gov/library/ publications/the-world-factbook/ rankorder/2078rank.html

saving technologies and alternative energy. In some cases, this has led banks to look more carefully at the environmental profile of individual clients.<sup>15</sup>

As with China's overall development, the business community's journey on the sustainability path is being compressed into a very short time period compared to developed countries. As a whole, sustainability themes are becoming material business issues in China. Chinese companies tend

not to articulate sustainability value propositions in the same manner as leading multinational corporations, but the pressures are certainly visible. Given the relatively low resource efficiency of much of Chinese industry, there are plentiful opportunities to cut costs though operational efficiency, as well as, in certain sectors, growing opportunities to benefit from improved market position through green products and services.

#### 1.3 INDIA

GDP Ranking 2010	9 <sup>th</sup>
Global Competitiveness Index Rank 2011-2012	56 <sup>th</sup>
UN Human Development Index Rank 2011	134 <sup>th</sup>
CO <sub>2</sub> Emissions per capita 2009 (t per capita)	1.4
Corruption Perceptions Index Rank 2011	95 <sup>th</sup>

The world's second most populous country with 1.2 billion people and the world's ninth-largest economy by purchasing power parity according to the IMF, India is set to continue on its growth trajectory. It is expected to leapfrog China's population by 2030 and to overtake Japan to become the world's third-largest economy by 2020. <sup>16, 17, 18</sup>

Despite this rapid development, sustainability as a corporate concern in India is still in its infancy. Reporting on sustainability performance has increased in the last five years, although according to the KPMG CR Report 2011, only 20 of the top 100 Indian companies report on corporate responsibility performance publicly and only 16

have a corporate responsibility strategy in place with well-defined objectives.

Sustainability is not a priority for most Indian investors either. Of those that do take sustainability issues into account, community-based initiatives and low carbon programs are priorities. A small percentage of private equity firms take account of environmental and health and safety liability. For sectors that rely strongly on their social license to operate, such as the manufacturing and mining sectors, companies face strong pressure from local governments to respond to community needs. Otherwise India's government, legal and financial institutions are only starting to drive the country's organizations to become more mindful of their environmental and social responsibilities.

In July 2011 the Ministry of Corporate Affairs in association with the Indian Institute of Corporate Affairs updated the 2009 National Voluntary Guidelines (NVG) on Social, Environmental and Economic Responsibilities of Business. Its principles cover transparency, governance, environmental protection and social concerns.

<sup>15</sup> Bank of China, 2010 CSR Report. http://pic.bankofchina. com/bocappd/report/201106/ P020110620680809691168.pdf

16 https://www.cia.gov/library/ publications/the-world-factbook/ geos/in.html

<sup>17</sup> http://blogs.ft.com/beyondbrics/2011/04/28/india-overtakingchina-not-so-fast/#axzz1h3WJjXyJ

In the public sector<sup>19</sup>, the Department of Public Enterprise in September 2011 issued its Guidelines on Sustainable Development for Central Public Sector Enterprises (CPSEs), which lay out compulsory sustainable development initiatives for CPSEs mainly focusing on environmental issues. As part of its annual performance evaluation of CPSEs during 2010-11, the sustainable development parameter is given a weight of five percent. As CPSEs currently account for 23.7% of the nation's total GDP, these guidelines can have a potentially high impact on the sustainability performance of India's public sector.<sup>20</sup>

In the financial sector, in December 2007 the Reserve Bank of India published a circular requiring banks to consider promoting sustainability through their own business practices and lending policies. In addition, the Institute of Chartered Accountants of India (ICAI) has undertaken a special project to suggest a suitable framework for sustainability reporting in Indian companies' annual reports.

Other incentives driving Indian companies to take sustainability into account revolve mainly around maintaining brand reputation and increasing visibility with sector peers internationally. The KPMG CR Report 2011 has also identified that 75 of India's 100 largest companies report on corporate responsibility to protect corporate reputation while 55 take into account ethical considerations.

Indian companies are expected to place increasing importance on climate change issues. KPMG India's Corporate Reporting Survey 2011 shows that 26% of India's 100 largest firms already identify opportunities related to climate change, 21% report their carbon footprint and 22% participate in the Carbon Disclosure Project (CDP).

As the post-Kyoto carbon emissions trading arrangements are still unclear, companies that were actively investing in low-carbon initiatives may begin to hesitate due to this uncertainty and narrow their investments. As initiatives such as the Carbon Disclosure Project become more common, however, companies are beginning to take their climate change impacts into account more seriously.

Although as a group they lag behind some of their international peers in terms of the percentage of companies reporting and engaging with sustainability issues, it is nonetheless clear that engagement is growing and Indian companies are increasingly attentive to corporate responsibility issues. While some large companies have started to establish a clear link between corporate responsibility and risk management, many still need convincing of the business case for integrating sustainability into their business strategies.

<sup>&</sup>lt;sup>19</sup> http://dpemou.nic.in/ MOUFiles/Sustainable\_Dev.pdf

<sup>&</sup>lt;sup>20</sup> http://www.kpmg.com/ IN/en/IssuesAndInsights/ ThoughtLeadership/Public-Sector-Enterprises.pdf and Department of Public Enterprises

#### 1.4 RUSSIA

GDP Ranking 2010	11 <sup>th</sup>
Global Competitiveness Index Rank 2011-2012	66 <sup>th</sup>
UN Human Development Index Rank 2011	66 <sup>th</sup>
CO <sub>2</sub> Emissions per capita 2009 (t per capita)	10.8
Corruption Perceptions Index Rank 2011	143 <sup>rd</sup>

Russia's economy is the world's 11th-largest, powered in large part by its abundant resource riches including natural gas, oil, coal, and precious metals. By 2020, Russia is tipped to become the world's sixth-largest economy.<sup>21, 22</sup>

Russia's resources giants lead the way when it comes to incorporating sustainability into the business. The KPMG CR Report 2011 shows that 58 of the country's 100 largest companies are publishing information on their corporate responsibility performance, led by exporters in the mining and oil and gas sectors. As might be expected they have more advanced sustainability practices in areas such as health and safety as well as environmental standards as they understand the need to meet international expectations and to stay in line with industry peers. Regulatory pressure relating to energy efficiency and environmental protection is also increasing. Russian regulations introduced from 2009 to 2011 include requirements to introduce mandatory energy and water metering and to label the energy efficiency of buildings and goods. The Russian government is also drafting legislation to strengthen environmental laws which are currently considered lenient. A package of six bills—covering topics including government environmental monitoring, marine oil pollution prevention measures and economic incentives for waste management present the largest environmental legislation reform of the last 20 years.

European regulations also affect Russian companies seeking to export to Europe. For example, REACH, the main European law regulating the production and import of chemicals, incorporated new amendments in 2010 that increase the amount of information that needs to be submitted when registering substances, such as a description of the methods of use and risk management procedures of different substances. To avoid the risk of exclusion from the European market, Russian companies must ensure compliance.

Russia's 2002 corporate governance code requires open joint stock companies and close joint stock companies to report on their compliance in their annual report, although few enforcement mechanisms exist, and there is no developed system for monitoring compliance. With respect to foreign investors and creditors, Russian companies take a more compliance-led approach to their sustainability requirements by incorporating international frameworks such as the Equator principles and various international corporate governance best practices.

While Russian investors do not tend to have specific sustainability requirements when investing in Russian companies, they do take corporate governance issues seriously as they are keen to protect their ownership rights.

According to the KPMG CR Report 2011, the main business drivers for reporting on corporate responsibility in Russia include ethical considerations as well as protecting corporate reputation and enhancing brand value. As yet, however, few Russian companies think sustainability policies could save them money or see a business case for integrating sustainability into their business strategies.

<sup>21</sup> http://blog.euromonitor. com/2010/07/special-report-top-10-largest-economies-in-2020.

<sup>22</sup> https://www.cia.gov/library/ publications/the-world-factbook/ geos/rs.html

#### 1 5 SOUTH AFRICA

GDP Ranking 2010	28 <sup>th</sup>
Global Competitiveness Index Rank 2011-2012	50 <sup>th</sup>
UN Human Development Index Rank 2011	123 <sup>rd</sup>
CO <sub>2</sub> Emissions per capita 2009 (t per capita)	7.5
Corruption Perceptions Index Rank 2011	64 <sup>th</sup>

South Africa is Africa's largest and the world's 28th-largest economy, powered in large part by its mining, energy and natural resources sectors. Mining and minerals contribute almost 9% directly and another 10% indirectly to GDP. They also represent nearly a third of the Johannesburg Stock Exchange's market capitalization.<sup>23</sup>

The effects these industries have on the environment and surrounding communities and the often inherently hazardous working conditions for employees have required companies in these sectors to manage and account for their impacts for many years and to respond to regulation, stakeholders and industry best practices. This reporting environment has spread to other sectors in the country. The KPMG CR Report 2011 shows that 97 of the country's 100 largest companies now publish their corporate responsibility performance, a significantly greater number than in the other emerging markets discussed in this article.

The 2009 King Code of Governance, also known as the King III Report, which requires companies listed on the Johannesburg Stock Exchange to publish integrated reports (albeit on an apply-or-explain basis), encourages companies to consider integrating sustainability into their overall strategy and reports. The KPMG CR Report 2011 shows that 25 of the 100 largest South African companies publish sustainability reports.

Although investors in South Africa may not yet differentiate widely between companies with average, good and exceptional reports, they are paying closer attention and are more likely to be wary of poorly performing organizations.

Energy security, carbon emissions and cost are significant issues affecting sustainability strategies and plans on a national and corporate level. South Africa is currently adding new coal-fired stations to meet its short-term needs<sup>24</sup>, although there is clear concern about the carbon implications. Constraints to building a more sustainable generation base, however, include access to finance, technology and skills.

As energy demands increase, energy costs are expected to grow. The possible introduction of an energy or carbon tax is another factor driving concerns about carbon output. While South Africa's absolute carbon output is not considered high, its economy is carbon-intensive relative to GDP. Without moves towards a less carbon-intensive economy, South Africa could become a significant carbon emitter.

Water constraints in South Africa are becoming a business imperative for water-intensive businesses, such as power companies. Capacity and infrastructure improvements will increase water costs, forcing water-intensive businesses to take a closer look at how they use and recycle water, an issue many companies are already taking action on.

Health and safety is another critical sustainability issue, primarily in South Africa's mining and natural resources sectors. A high number of injuries or a fatality will stop operations while investigations are carried out to identify causes and introduce preventa-

<sup>&</sup>lt;sup>23</sup> Facts and Figures 2010, Chamber of Mines of South Africa: http://www. bullion.org.za/Publications/ Facts&Figures2010/F%20 and%20F%202011-small.pdf

<sup>&</sup>lt;sup>24</sup> http://www.miningmx.com/ news/energy/Eskom-plans-thirdnew-coal-station.htm

tive measures. Mismanagement of health and safety can have an immediate impact on a company's bottom line and investor profits. Companies, therefore, know that managing health and safety issues in their operations is essential to attract investors.

Future issues include how carbon emissions will be dealt with as a result of COP17 in Durban and the question of how companies continue on the journey towards integrated reporting.

#### 1.6 SUMMING UP

The emerging economies' rate of development and economic growth is extraordinary and unprecedented. It is pulling millions out of poverty worldwide and offering them the means to catch up with the developed economies.

Developing economies also have an opportunity to outperform their developed economy peers by growing their economies on a more sustainable basis. The industrial era for most developed nations came at the cost of widespread environmental pollution and pressure on communities and individuals. Developing nations are facing the same kinds of choices and dilemmas today, but it is clear their awareness of these choices and their understanding of how to negotiate a way through them more sustainably is growing. Investors and companies that understand the nature and detail of the opportunities this presents will be best placed to profit from them.

# 2 INNOVATION MANAGEMENT IN THE SAM CORPORATE SUSTAINABILITY ASSESSMENT



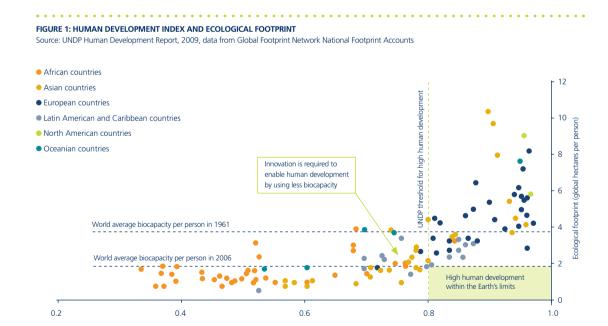
#### Innovation Management in the SAM Corporate Sustainability Assessment

Hybrid vehicles. Bio-plastics. Online music purchasing platforms. Carbon fibers. Laser-cutting technologies. These are just a few examples of innovative products and processes that have helped companies reach new markets, speed up production processes and transform how products are delivered to consumers. But what are some of the key drivers leading to innovation, and what steps are companies taking to ensure that their best ideas are implemented in the most effective manner? Jvan Gaffuri, Senior Manager Sustainability Services, offers an overview on how companies that participated in the SAM Corporate Sustainability Assessment approach innovation management.

#### 2.1 INNOVATION AND SUSTAINABILITY

Reconciling human development and economic growth with our ecological footprint represents one of this century's greatest challenges. Improving levels of human development places additional pressures on the ecosystem and reduces the amount

of average biocapacity available per person. History has shown that as countries progress on the UN Human Development Index—a measure of a country's achievements based on GDP per capita, life expectancy and education—they also increase their environmental footprint.



Such increases are even more drastic once a country has reached a high level of human development: every marginal unit of improvement has an even greater impact on the ecosystem. As a result, two key macroeconomic challenges have emerged:

- 1. reducing the ecological footprint of developed countries to sustainable levels, and
- fostering economic growth in emerging countries while limiting the environmental impact of their growing prosperity.

Clearly, many of society's primary engines of economic growth such as agriculture, energy generation, construction & housing, mobility, and materials must shift away from unsustainable "business as usual" practices towards sustained economic growth that can support a growing population well into the future. Such challenges require innovative solutions, and companies that can address these challenges will enjoy a competitive advantage in the long run.

At the microeconomic level, striking a balance between economic efficiency and societal progress is also required. Fearing a negative impact on their bottom line, corporations are often hesitant to embark on more sustainable growth strategies. Although many companies are increasingly recognizing the financial benefits of implementing corporate sustainability strategies, some corporate executives still believe that societal benefits and financial profits are mutually exclusive. This may be true if a company's strategy has a particularly narrow time horizon that favors short-term financial returns over long-term goals. While a strong focus on cost reduction may indeed generate immediate benefits for companies, these fade once environmental and social externalities are taken into account.

One of the main goals of corporate innovation is to remain competitive by gaining access to new markets and reducing process costs. Innovation enables companies to improve efficiencies by reducing the amount of energy and material inputs used, ultimately lowering production costs. It also allows companies to update their range of products and services, avoiding losses as earlier generations of products and services become obsolete.

Thus, from the macroeconomic and the microeconomic perspective, innovation is required in order to enable both sustainable development and financial success. For this reason, sustainability has emerged as one of the key drivers of innovation.<sup>2</sup> A sustainability strategy that considers societal needs and aims to reduce the company's ecological footprint can provide companies with a framework for developing innovations to their processes and products, benefitting companies and society alike.

#### 2.1.1 The Role of Environmental Regulations

Though some may consider regulations to be too restrictive by imposing limitations on companies' activities, generating additional compliance-related costs and reducing productivity, regulations have, in fact, played an important role in encouraging environmental innovations, even if mainly process-related. This seemingly counterintuitive notion is described by the Porter Hypothesis, which argues that "...properly designed environmental standards can trigger innovation that may partially or more than offset the costs of complying with them." Thus, environmental regulation can indeed stimulate innovation by making companies aware of and willing to exploit otherwise missed opportunities.<sup>3, 4</sup> Proactive company behavior that anticipates future regulations, identifies opportunities arising from these changes and implements and redesigns products or processes to prevent negative environmental impacts, not only benefits the environment, but often also helps companies establish competitive advantages.5, 6, 7

"Innovation is required in order to enable both sustainable development and financial success. For this reason, sustainability has emerged as one of the key drivers of innovation."

<sup>&</sup>lt;sup>1</sup> Vision 2050, WBCSD, 2010

<sup>&</sup>lt;sup>2</sup> Ram Nidumolu, C.K. Prahalad, and M.R. Rangaswami, Why Sustainability Is Now the Key Driver of Innovation, Harvard Business Review, September 2009

<sup>&</sup>lt;sup>3</sup> Porter, M.E., van der Linde, C., 1995. Toward a New Conception of the Environment-Competitiveness Relationship. Journal of Economic Perspectives 9, 97-118

<sup>&</sup>lt;sup>4</sup> Bernauer, T., Engels, S., Kammerer, D. and Nogareda, J.S., 2007. Explaining Green Innovation: Ten Years after Porter's Win-Win Proposition: How to Study the Effects of Regulation on Corporate Environmental Innovation? In: Frank Biermann, P.-O.B., Peter, Henning Feindt, a.K.J. (Eds.), Politik und Umwelt. PVS Verlag

<sup>&</sup>lt;sup>5</sup> Berry, M.A., Rondinelli, D.A., 1998. Proactive Corporate Environmental Management: A New Industrial Revolution. Academy of Management Executive 12, 38-50

<sup>&</sup>lt;sup>6</sup> Hart, S.L., Ahuja, G., 1996. Does it Pay to be Green? An Empirical Examination of the Relationship between Emission Reduction and Firm Performance. Business Strategy and the Environment 5, 30-37

<sup>&</sup>lt;sup>7</sup> Aragón-Correra, J.A., Sharma, S., 2003. A Contingent Resource-Based View of Proactive Corporate Environmental Strategy. Academy of Management Review 28, 71-88

"The growing strategic importance of innovation requires companies to implement a formalized process involving various areas of the firm, as well as a set of indicators to measure achievements."

#### 2.1.2 The Importance of Innovation

Although most executives agree that innovation is a key contributor to their company's success, they also acknowledge that innovation is difficult to generate, track and manage. According to a McKinsey survey<sup>8</sup> conducted in 2010, 84% of top managers stated that innovation is one of their top priorities. The economic recession has not changed this view: the ability to convert new ideas into products and services remains a key goal for every company. Despite economic difficulties, innovation continues to receive financial support from company management; but a challenging economic environment further underscores the importance of carefully monitoring and managing the innovation process. Not surprisingly, challenges arise—particularly in the early stages of innovation process management when priorities need to be defined, budgets allocated accordingly, targets set, and metrics to measure success have to be introduced. 42% of the respondents state that improvements in the organization alone would have a significant impact on innovation performance. Thus, the growing strategic importance of innovation requires companies to implement a formalized process involving various areas of the firm, as well as a set of indicators to measure achievements.

#### 2.2 MEASURING INNOVATION MANAGEMENT

In order to evaluate companies' innovation management processes and tools for measuring the outcomes of their innovation initiatives, SAM introduced a range of innovation-related questions into its annual Corporate Sustainability Assessment in 2009. Each year, SAM invites 2,500 companies to participate in the annual Corporate Sustainability Assessment (CSA), which consists of an extensive questionnaire containing over 100 general and industry-specific questions covering the economic, environmental and social dimensions.

Because the information collected through the assessment is used in SAM's valuation analysis, the CSA focuses on sustainability factors that are relevant to each industry, material to the companies' financial performance and under-researched in conventional financial analysis. By analyzing the sustainability profile of companies, SAM can gain a more comprehensive view of their quality of management and ability to generate value.

<sup>8</sup> McKinsey Global Survey results, Innovation and commercialization, 2010 Innovation is a complex and multidimensional concept that cannot be measured directly or with one single indicator. Therefore, SAM seeks to identify

more robust innovation metrics that look beyond innovation inputs and also analyze innovation process management and innovation outputs:

"Innovation is a complex and multidimensional concept that cannot be measured directly or with one single indicator."

FIGURE 2: INNOVATION INDICATORS USED IN THE SAM CORPORATE SUSTAINABILITY ASSESSMENT Source: SAM

#### **Innovation Input**

- R&D Spending
- Share of R&D budget invested per innovation stage
- Open Innovation

### Innovation Process Management

- Cycle, success rate and KPIs for the different innovation stages
- Structures and Mechanism

#### **Innovation Output**

- Product Innovations
- Process Innovations
- Environmental Innovations
- Social Innovations

Innovation Input: measures the amount of financial resources dedicated to the innovation process.

**Innovation Process Management:** asks companies to state whether they have processes and systems in place to manage innovation and whether they have defined relevant key performance indicators (KPIs).

**Innovation Output:** assesses the outcome of the innovation process. Examples include the number of product and process innovations and success rates of different innovation steps.

For the 2011 Corporate Sustainability Assessment, a range of innovation management questions has been incorporated into the sustainability questionnaire for industries in which innovation is expected to have the greatest impact on companies' competitiveness. The specific questions used to assess innovation management vary from industry to in-

dustry to reflect specific characteristics that are particularly relevant to each sector.

In 2011, SAM collected innovation data and calculated scores for a total of 319 companies in the following sectors:

#### FIGURE 3: SECTORS EVALUATED ACCORDING TO SAM'S INNOVATION MANAGEMENT CRITERION

Sector
Aerospace & Defense
Auto Parts & Tires
Automobiles
Beverages
Biotechnology
Chemicals
Clothing, Accessories & Footwear
Communication Technology
Computer Hardware & Electronic Office Equipment
Computer Services & Internet
Diversified Industrials
Durable Household Products
Electric Components & Equipment
Electronic Equipment
Fixed Line Communications

Sector
Food Producers
Furnishing
General Retailers
Healthcare Providers
Industrial Engineering
Leisure Goods
Medical Products
Mobile Telecommunications
Nondurable Household Products
Personal Products
Pharmaceuticals
Semiconductors
Software
Waste & Disposal Services

#### 2.3 RESULTS

The evaluation of the criterion began with an analysis of the innovation management scores calculated for 319 companies in 2011. These companies were then organized into three groups according to the score they received for the innovation criterion:

**Excellent performance:** companies with a high innovation score of > 70 (out of a maximum of 100 points)

**Average performance:** companies with an innovation score of between 40 and 70

**Poor performance:** companies with an innovation score < 40

Companies were then grouped at the supersector level (a broader grouping of similar industries) in order to identify which supersectors had the highest percentage of top-performing companies. Similar breakdowns were also carried out for selected indicators within the innovation management criterion such as R&D Spending, Open Innovation and Environmental Innovation.

The results for the 2011 Innovation Management criterion are summarized in the chart below:

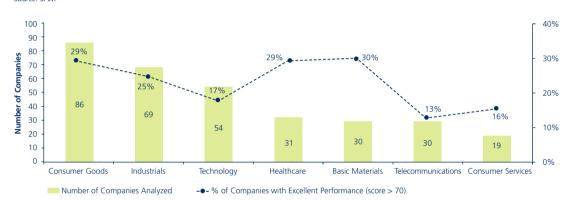
FIGURE 4: BREAKDOWN OF COMPANIES BY INNOVATION MANAGEMENT SCORES



By looking at the distribution of the scores among the different supersectors for which the innovation criterion applies, one can observe that the consumer goods, healthcare and basic materials supersectors have the highest percentage of companies receiving an excellent score. Industrials are in line with the average, while technology, telecommunications and consumer services are slightly lagging.

It is somewhat surprising to see the below average performance of the technology supersector. One of the reasons for this is that technology companies are often hesitant to disclose information on their innovation management processes and outcomes. Companies that are not transparent about their processes and measurement tools tend to receive lower scores.





A geographical breakdown of the companies based on their country of domicile reflects a high level of disclosure—and as a result, higher average scores—for companies based in Europe and Asia ex-Japan, while scores are lower in the US and Japan. This is no coincidence, as many

technology companies, which were found to be less transparent, are located in those two countries. Asia ex-Japan, which is home to a large number of IT companies, but has a higher percentage of companies with an excellent innovation score, is an exception to this trend.

#### FIGURE 6: GEOGRAPHIC BREAKDOWN OF COMPANIES WITH EXCELLENT INNOVATION MANAGEMENT PERFORMANCE



#### 2.3.1 Innovation Input

#### **R&D Spending**

Disclosure on research and development (R&D) spending is one of the elements used to measure the inputs to the innovation process. Companies were asked to provide the total amount of R&D expenditures over the last four years, the breakdown between internal spending and outsourced spending, personnel costs as well as the total number of full-time employees dedicated to R&D efforts.

Data for R&D expenditures was collected for the 288 companies in the sectors that were eligible for this question. The results were once again clustered

according to their performance for this measure: excellent (score > 70), average (score between 40 and 70) and poor (score < 40).

Based on the results of the 2011 assessment, companies can be classified into two broad groups: 47% of the companies show excellent performance for this measure, while 41% of the sample received a poor score. Interestingly, the percentage of companies achieving an average score is relatively small. One reason for this is that companies generally fall into one of two extremes: either they prefer to report only minimal information on R&D spending as required by minimum accounting standards, or they choose to be fully transparent.

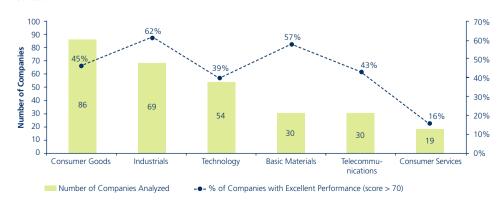
FIGURE 7: BREAKDOWN OF COMPANIES BY R&D SPENDING SCORE Source: SAM



Among the different supersectors, industrials and basic materials contained the highest percentage of companies with excellent performance, followed by consumer goods, technology and telecommunications.

However, it is important to note that measuring R&D expenditures alone is not sufficient for managing the innovation process. Such indicators offer limited insights into a company's innovation potential: higher R&D expenditures do not necessarily lead to more innovation.

FIGURE 8: SUPERSECTOR BREAKDOWN OF COMPANIES WITH EXCELLENT R&D SPENDING PERFORMANCE Source: SAM



"New ideas frequently come from consumers, suppliers, partners, research institutions or even from regulators."

#### **Open Innovation**

Because innovation is not only generated inside the company, the innovation management process must also consider and integrate external sources of innovation. New ideas frequently come from consumers, suppliers, partners, research institutions or even from regulators. Therefore, open innovation approaches are becoming increasingly vital to generating new ideas that can then be further developed within the company.

For this reason, when analyzing inputs to the innovation process, SAM also evaluates the companies' level of openness in their interactions with the outside world as they seek to develop new ideas. The assessment considers factors such

as research collaborations with external business partners, distributed creativity, acquisitions, corporate venture capital, spin-offs/start-ups, technology licensing and open source.

When the 238 companies that were eligible for the open innovation questions are grouped according to their scores on this measure, 20% of the companies received a score of > 70, indicating that they use open innovation tools extensively. 30% of the companies received an average score of between 40 and 70, meaning that they employ some open innovation tools. 50% of the participating companies that were asked this question either do not actively use such tools or did not provide information.

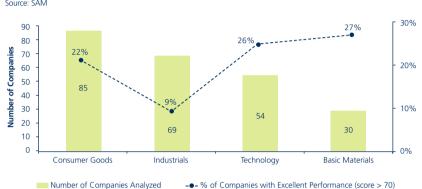




The technology and basic materials sectors, which had a much higher proportion of companies achieving excellent performance (score > 70) for this indicator, are using open innovation more actively

than companies in other sectors. Industrials, on the other hand, appear to be more cautious about actively using open innovation tools.

#### FIGURE 10: SUPERSECTOR BREAKDOWN OF COMPANIES WITH EXCELLENT OPEN INNOVATION PERFORMANCE



#### 2.3.2 Innovation Process Management

In order to identify state-of-the-art key performance indicators (KPIs) used in innovation management, companies were asked to provide the top three measures used within each of the four main stages of innovation: Core Research, Ideation/ Applied Research, Development and Product Commercialization & Process Implementation.

#### FIGURE 11: STAGES OF INNOVATION PROCESS MANAGEMENT

Source: SAM

#### **Innovation Input**

- R&D Spending
- Share of R&D budget invested per innovation stage
- Open Innovation

#### Innovation Process Management

- Cycle, success rate and KPIs for the different innovation stages
- Structures and Mechanism

#### **Innovation Output**

- Product Innovations
- Process Innovations
- Environmental Innovations
- Social Innovations

## **Stages of Innovation Process Management**

Core Research Ideation / Applied Research

Development

Product Commercialization & Process Implementation

## **Core Research:** research or academic research with no direct or immediate commercial benefits.

The results of the assessment confirm that the core research phase is mainly driven by project planning activities, which include conducting feasibility studies, resource allocation and milestone definition. Important innovation output indicators used by companies to measure the success of their core research phase are primarily related to intellectual property such as the number of publications and patents registered and an evaluation of the knowhow built up during this stage.

## **Ideation/Applied Research:** the systematic or unsystematic generation of ideas.

Companies cited the importance of tracking activities related both to ideation inputs such as R&D expenditures, and outputs such as the number of new ideas generated, the share of new ideas that make it to the next phase of development and the life-time of new products. Project planning was also considered to be an important element of the ideation stage and included activities such as business plans and feasibility studies, all of which are important during the early stages of the innovation process.

What seems to be missing for most companies in this stage are indicators showing that companies foster innovation by encouraging creativity. For example, companies could allocate budget or time to "free" or unconstrained research and then track how many innovations come out of these less structured activities.

## **Development:** refers to the development of specific Product Innovations and Process Innovations.

#### Product Innovations

Product innovations include goods and services that are new to the company or that reflect major technical improvements or upgrades to existing products such as improved quality, functionality or new packaging.

In order to evaluate the success of the development stage, companies used financial indicators such as R&D budget, revenue projections and pipeline value to estimate the value of the new product. Companies also cited a range of market research indicators such as user tests, pilot projects, market field test results, client feedback and the estimated impact on the brand's value in order to gage the potential success of the product under development.

#### **Process Innovations**

Process innovations refer to processes that are new to the company. These include the introduction of major or technical improvements to the manufacturing technologies or processes used in the production of goods or in the distribution of goods and services.

Companies cited a number of technical and financial indicators used to evaluate the benefits of process innovations that emerge during the development stage. Technical feasibility and monitoring indicators used to track the new production process include evaluating the success of pilot projects, mass productivity tests, and measuring process quality and manufacturing efficiency improvements. Financial indicators included a range of cost–benefit analyses.

## **Product Commercialization and Process Implementation:** refers to the actual commercialization of a product or the implementation of a new process.

The most important indicators companies use to evaluate their product commercialization efforts are related to marketing activities such as tracking the creation of new marketing materials, event promotions, marketing plans, media presence, and customer and competitors' reactions.

#### 2.3.3 Innovation Output

A critical component of any innovation strategy is a company's ability to measure the outcomes of its innovation initiatives against its stated targets. Companies should be able to track the number and effectiveness of their product or process innovations, and whether any of their innovations have led to positive environmental or social outcomes.

Because many innovations are specifically developed to meet social or environmental goals, SAM's assessment of innovation outputs includes a section focusing exclusively on social and environmental innovations. The CSA defines environmental innovations as all process, product and organizational innovations that are beneficial to the environment and whose primary objective is to improve environmental performance.

For the 2011 assessment, 227 companies were asked to provide information on environmental innovation. In order to identify the importance of environmental factors, companies were asked to state their primary motivations for implementing environmental innovations. Among others, companies cited commitments to reducing their carbon footprint, or incorporating environmental design into their products, substituting away from hazardous substances, reducing energy and water consumption, and recycling waste and by-products.

The companies were grouped based on their environmental innovation score. More than three-fourths of the companies use quantitative measures to track environmental innovations and consider them to be an important element of their innovation strategy. The outcome is consistent with recent studies<sup>9</sup> highlighting the importance of sustainability as a key driving force behind innovation.

<sup>9</sup> Ram Nidumolu, C.K. Prahalad, and M.R. Rangaswami, Why Sustainability Is Now the Key Driver of Innovation, Harvard Business Review, September 2009

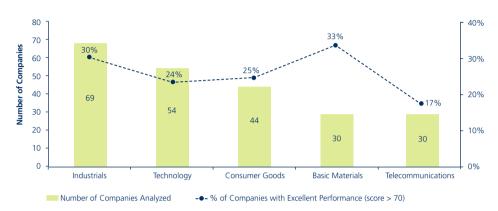




Among the major supersectors, industrials and basic materials show the highest percentage of com-

panies with excellent performance on environmental innovation.

FIGURE 13: SUPERSECTOR BREAKDOWN OF COMPANIES WITH EXCELLENT ENVIRONMENTAL INNOVATION PERFORMANCE SOURCE: SAM



#### 2.4 CONCLUSION

"Companies have recognized that they can generate competitive advantages by introducing environmental innovations because they often enable the more efficient use of resources, leading to significant cost savings."

Innovation is the process of translating a new idea into a technological and commercial success and is vital to ensuring the long-term growth of companies. Because an effective sustainability strategy can help companies create a competitive advantage, it has evolved into an increasingly important driver guiding the innovation process.

Environmental and social factors are becoming an increasingly important element of the innovation management process. Companies have recognized that they can generate competitive advantages by introducing environmental innovations because they often enable the more efficient use of resources, leading to significant cost savings. This is one of the most compelling arguments for introducing process changes. Further, pressure from customers, suppliers, regulators and stakeholders has continuously increased, pushing companies to

introduce measures that help them improve their environmental footprint.

Analysis of the data submitted by companies reveals that innovation leaders, as identified by the 2011 Corporate Sustainability Assessment, actively use a wide range of indicators to manage the effectiveness of their innovation strategies. However, given that 39% of the participating companies achieved a low innovation score, overall company disclosure levels could be improved further.

Well-defined innovation performance indicators are a useful management tool for tracking the success of an innovation, and are therefore an important component of a comprehensive innovation management strategy aimed at generating competitive advantages. However, beyond simply measuring innovation inputs and outputs, companies must also actively manage their progress against stated targets.

## 3 SUSTAINABILITY IN THE CHEMICAL INDUSTRY



#### 3. Sustainability in the Chemical Industry

Analyst Andrea Ricci, PhD, offers an overview of how the chemical industry's approach to sustainability has evolved over the years, and based on analysis of data from SAM's Corporate Sustainability Assessment for the chemical industry, highlights some of the key sustainability issues faced by the industry today.

#### 3.1 INTRODUCTION

For well over a century, the chemical industry has sourced oil-based raw materials and minerals and turned them into products serving an impressive range of applications and industries. Examples span from dyes and additives for plastics, wood and electronics to polymers for the automotive, construction and consumer industries. From fragrances to chemical intermediates that are converted into high-value pharmaceuticals, and from fertilizers and agrochemicals to soaps and waxes, chemicals have transformed our lives.

Although society has welcomed the many benefits that chemical products bring to daily life—ultimately becoming accustomed to their added value and taking them for granted—it has also become increasingly aware that the growing presence of chemical products and operations comes at a price. Increased waste production and greenhouse gas emissions, production of toxic intermediates, concerns over the employee safety and the safety of communities located near chemical facilities have led to growing unease over the amount of chemicals in the environment and their effect on our health and well-being.

As growing awareness of the burden of chemical operations has generated public distrust, it comes as no surprise that sustainability thinking in the industry originated in the form of a stronger corporate commitment towards mitigating the environmental impact of manufacturing operations, the remediation of environmental damage caused by accidents and the improvement of safety in the work place.

To address these societal concerns, the chemical industry founded Responsible Care¹ in 1985 as a voluntary initiative requiring signatory companies to commit to improving their performance on environmental, safety and product stewardship matters. Today, the initiative is active in 52 countries whose combined chemical operations account for nearly 90% of global chemicals production. Over the years, chemical companies have come to realize that investments made to improve the sustainability of their operations do have a positive economic impact on their bottom line profitability, for instance, in the form of lower energy costs or health-related liabilities.

http://www.icca-chem.org/en/
 Home/Responsible-care/

"Sustainability has been a key driver enabling the chemical industry to develop solutions for the future. As an industry-wide initiative, Responsible Care provides the chemical industry with a unique framework for developing continuous improvements throughout the industry's operations and value chains in order to meet society's environmental, social and economic needs."

John Geeraerts, Chairman, Responsible Care Europe

The last few decades have also witnessed the rise of product stewardship, which grew out of demand for higher transparency on the composition of chemical products and their long and short-term effects on the environment and end-users. Today, regulatory frameworks such as REACH,2 are in place to protect consumers. At the same time, non-governmental organizations have compiled and published lists of chemicals whose use has sparked concerns, in order to promote debate and help the industry cleanse its product portfolio by eliminating the use of certain substances that have been deemed harmful.<sup>3</sup> Beyond bearing the costs of adhering to legislative frameworks, chemical companies have recognized the importance of avoiding the economic consequences of developing products that run the risk of being banned in the future. For instance, they have been increasingly engaging in product life cycle analysis early on during the innovation process, a practice that greatly contributes to the improvement of their sustainability footprint.<sup>4</sup>

The chemical industry is an innovation-driven industry: starting with a relatively small spectrum of raw materials, it devises innovative processes and chemical reactions in order to produce novel molecules designed to meet specific applications. Over the decades, the research community has come to recognize its unique position enabling it to shape the sustainability agenda within the chemical industry. In the late 1990's, the "twelve principles of green chemistry" were articulated by Paul Anastas and John Warner. These principles consist of a series of standards and objectives, and are now broadly accepted by chemical companies as an industry-wide benchmark for best sustainable practices.

- <sup>2</sup> The Registration, Evaluation, Authorization and Restriction of Chemical Substances is the European Community's regulation on chemicals and their use. The aim of REACH is to improve the protection of human health and the environment through the better and earlier identification of the intrinsic properties of chemical substances. http://ec.europa.eu/ environment/chemicals/reach/ reach\_intro.htm
- <sup>3</sup> The SIN (Substitute It Now!) List is an NGO driven project to speed up the transition to a toxic free world. The List consists of 378 chemicals that ChemSec has identified as Substances of Very High Concern based on the criteria established by the EU chemical regulation, REACH. http://www.sinlist.org/
- <sup>4</sup> http://www.icca-chem.org/ Home/News-and-press-releases/ News-Archive/2009/G8-Chemical-Industry-proposes-effective-toolsfor-climate-protection1/
- <sup>5</sup> Anastas, P. T.; Warner, J. C.; Green Chemistry Theory and Practice. Oxford: Oxford University Press, 2000.

#### TWELVE PRINCIPLES OF GREEN CHEMISTRY

#### 1. Prevention

It is better to prevent waste than to treat or clean up waste after it has been created.

#### 2. Atom Economy

Synthetic methods should be designed to maximize the incorporation of all materials used in the process into the final product.

#### 3. Less Hazardous Chemical Syntheses

Wherever practicable, synthetic methods should be designed to use and generate substances that possess little or no toxicity to human health and the environment.

#### 4. Designing Safer Chemicals

Chemical products should be designed to effect their desired function while minimizing their toxicity.

#### 5. Safer Solvents and Auxiliaries

The use of auxiliary substances (e.g., solvents, separation agents, etc.) should be made unnecessary wherever possible and innocuous when used.

#### 6. Design for Energy Efficiency

Energy requirements of chemical processes should be recognized for their environmental and economic impacts and should be minimized. If possible, synthetic methods should be conducted at ambient temperature and pressure.

#### 7. Use of Renewable Feedstocks

A raw material or feedstock should be renewable rather than depleting whenever technically and economically practicable.

#### 8. Reduce Derivatives

Unnecessary derivatization (use of blocking groups, protection/deprotection, temporary modification of physical/chemical processes) should be minimized or avoided if possible, because such steps require additional reagents and can generate waste.

#### 9. Catalysis

Catalytic reagents (as selective as possible) are superior to stoichiometric reagents.

#### 10. Design for Degradation

Chemical products should be designed so that at the end of their function they break down into innocuous degradation products and do not persist in the environment.

#### 11. Real-time Analysis for Pollution Prevention

Analytical methodologies need to be further developed to allow for real-time, in-process monitoring and control prior to the formation of hazardous substances.

#### 12. Inherently Safer Chemistry for Accident Prevention

Substances and the form of a substance used in a chemical process should be chosen to minimize the potential for chemical accidents, including releases, explosions, and fires.

<sup>\*</sup>Anastas, P. T.; Warner, J. C.; Green Chemistry: Theory and Practice, Oxford University Press, 2000.

More recently, the rise of long-term megatrends has provided the chemical industry with added incentives for unlocking its potential to deliver sustainability-related innovations. Examples of such innovations include new battery materials to support electric-based mobility, lightweight and nano-structured composites, catalysts and additives for the production of renewable energies and the development of industrial biotechnology and biomass based processes to reduce our dependence on oil.

Finally, for the chemical industry sustainability has also taken the form of increased corporate governance and transparency, thereby ensuring that companies are managed with the best interests of their shareholders in mind, while also respecting stakeholders such as customers, employees and suppliers. Integrity and transparency of corporate operations and decisions are particularly relevant for global chemical companies: because they are active in different local markets, they must simultaneously comply with international standards and local regulations in order to establish successful long-term business relationships. Local quality standards or labor practices vary from country to country, and companies must be willing and able to show that they have gone beyond minimum international standards and have made an effort to adapt to local requirements. Thus, transparency is particularly important if companies wish to maintain their social license to operate in certain markets and is a necessary requirement for engaging in constructive dialogue with local stakeholders and the communities in which they are active.

#### 3.2 BACKGROUND AND METHODOLOGY

In order to inform the debate on sustainability topics and identify key trends that are relevant to the chemical industry, SAM has analyzed data collected from chemical companies that participated in the SAM Corporate Sustainability Assessment (CSA) over the last three years.

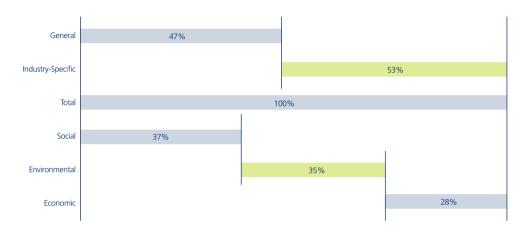
SAM's investment methodology is based on the assessment of a company's sustainability profile and on the integration of this information into standard financial analysis. The collection of company-specific sustainability data is therefore key to obtaining a comprehensive financial profile for each company. For this reason, SAM invites the largest 2,500 publicly traded companies to participate in its annual Corporate Sustainability Assessment. This questionnaire-based assessment covers a range of financially relevant economic, environmental and social criteria through over 1,000 data points. Because this information is integrated into financial analysis, SAM focuses on sustainability factors that can have an impact on companies' financial performance. At the same time, the information collected through the assessment provides a valuable overview of sustainability practices in several industry sectors.

Similar to other sectors, the sustainability questionnaire for the chemical industry is designed to capture both general and industry-specific criteria covering the economic, environmental and social dimensions, as shown in Figures 1 & 2. Each dimension consists of approximately 5-6 criteria, and each criterion contains approximately 20 questions, totaling approximately 100 questions. For each company, a total sustainability score of up to 100 points is calculated using a weighted average of the three dimensions.

"The rise of longterm megatrends has provided the chemical industry with added incentives for unlocking its potential to deliver sustainabilityrelated innovations."

#### SAM CORPORATE SUSTAINABILITY ASSESSMENT FOR THE CHEMICAL INDUSTRY

#### FIGURE 1: WEIGHTING SCHEME: REFLECTING INDUSTRY-SPECIFIC EXPOSURE Source: SAM



#### FIGURE 2: SUSTAINABILITY CRITERIA FOR THE CHEMICAL INDUSTRY

Source: SAM

Economic Dimension	Criteria
Corporate Governance	General
Risk & Crisis Management	General
Codes of Conduct/Compliance/Corruption & Bribery	General
Customer Relationship Management	Industry-Specific
Innovation Management	Industry-Specific

Environmental Dimension	Criteria
Environmental Reporting	General
Environmental Policy/Management System	Industry-Specific
Operational Eco-Efficiency	Industry-Specific
Product Stewardship	Industry-Specific
Climate Strategy	Industry-Specific
Genetically Modified Organisms	Industry-Specific

Social Dimension	Criteria
Social Reporting	General
Labor Practice Indicators	General
Human Capital Development	General
Talent Attraction & Retention	General
Corporate Citizenship & Philanthropy	General
Occupational Health & Safety	Industry-Specific
Standards for Suppliers	Industry-Specific

# **Economic Dimension (28%)**

Cross-industry criteria such as corporate governance, risk & crisis management, and codes of conduct are complemented by industry-specific criteria that assess the chemical industry's core offering: chemical products—both from a customer relationship management and innovation management point of view.

# **Environmental Dimension (35%)**

Along with the general criterion *environmental reporting*, specific criteria have been tailored to the chemical industry over the years to capture a company's ability to measure its emissions (*operational eco-efficiency*), assess the environmental impact of its products (*product stewardship*) and measure the impact of its operations on climate change (*climate strategy*).

# Social Dimension (37%)

General criteria focus on assessing the relationship between a company and its current and prospective employees (social reporting, labor practice indicators, human capital development and talent attraction & retention). Because of their relative importance to chemical operations, certain criteria have been specifically tailored to the chemical industry to assess occupational health & safety standards as well as the company's commitment towards establishing quality standards for its suppliers.

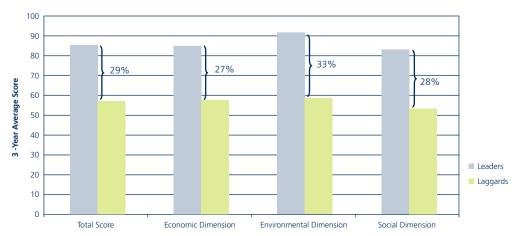
For the purpose of this analysis, data was retrieved from the annual SAM CSAs carried out over the last three years (2009-2011), a period during which the participation of chemical companies has been relatively steady. For each of the three years examined, sustainability scores for the top 20% performing companies (sustainability leaders) and the worst 20% performing companies (sustainability laggards) were retrieved. Three-year average scores were calculated at the total level, the dimension level and the criteria level for both the group of leaders and laggards. In order to carry out a gap analysis and determine which criteria differentiate the leaders from the laggards, the 3-year average scores for the leaders were compared to those of the laggards.

# 3.3 RESULTS AND DISCUSSION

# 3.3.1 Economic, Environmental and Social Dimension

Figure 3 provides an overview of 3-year average scores for sustainability leaders and laggards in the chemical sector for the economic, environmental and social dimensions. In addition, the 3-year average of the total sustainability score, which is calculated using a weighted average of the three dimensions, is shown for the leaders and the laggards.





The 3-year average total score for the sustainability leaders is higher than that of the sustainability laggards by an average of 29 points, and a similar difference can be observed for each of the three dimensions: economic, environmental and social. Most notably, both leaders and laggards achieve the highest average score in the environmental dimension and the lowest average score in the social dimension.

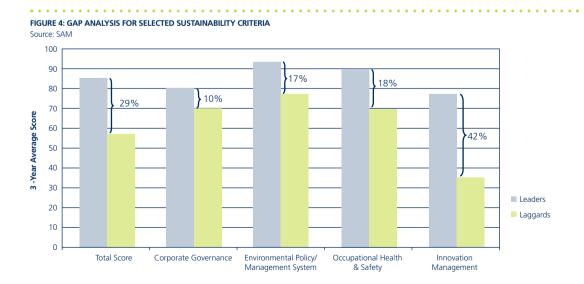
Although the results at the dimension level are somewhat predictable, analysis at the more granular criteria level reveals some trends worthy of further discussion: Figure 4 shows a gap analysis for the criteria related to *corporate governance*, environmental policy, occupational health & safety and innovation management.

# 3.3.2 Corporate Governance, Environmental Policy and Occupational Health & Safety: Traditional Sustainability Factors Go Mainstream

For the corporate governance, environmental policy, and occupational health & safety criteria, the average gap between the sustainability leaders

and laggards ranges between 10 and 18 points and is much smaller than the average difference of 29 points at the total score level. In other words, according to these sustainability criteria, even though laggard companies may lack sustainable practices in other corporate sustainability metrics—thereby achieving a lower total sustainability score—they have rather high standards in the areas of corporate governance, operational safety and environmental awareness. This suggests that minimum standards for these three measures have been widely adopted by the chemical sector and have now become mainstream.

One possible explanation for this is that the chemical industry's relatively early awakening to the importance of sustainability issues and Responsible Care's contributions have led to the development of high industry standards over the decades. On the other hand, one could also argue that because customers demand high levels of transparency on sustainability issues, these factors have now become minimum business qualifiers, rather than business winners or differentiators within the chemical industry.



# **Innovation Management**

Among the sustainability factors discussed in the introduction, innovation management is an exception to the trend observed above, with the leaders greatly outperforming the laggards by an average of 42 points over the 3-year period. Based on the data collected through the CSA, this stems from the sustainability leaders' superior ability to effectively manage innovation at every step of the development and implementation process: beginning with the measurement of the innovation inputs to the tracking of the outputs, as well as the measurement of the environmental contributions of their innovations.

# 3.3.3 Climate Strategy, Standards for Suppliers, and Human Capital Management

Leaders significantly outperform laggards in all of the criteria that fall outside the more traditional sustainability measures discussed earlier. These differences are particularly pronounced in the climate strategy, standards for suppliers and human capital development criteria, as shown in Figure 5.

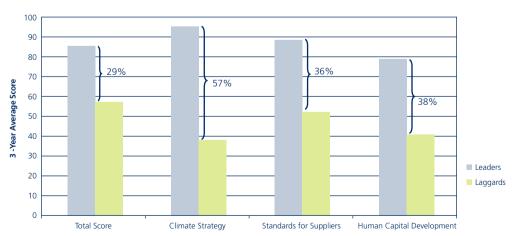
# **Climate Strategy**

Regarding climate strategy, all leaders report the use of carbon intensity as a key performance indicator; they claim to set emissions reduction targets and demonstrate the ability to quantitatively and qualitatively analyze all direct and indirect greenhouse gas emissions. Furthermore, sustainability leaders can provide detailed sensitivity analyses on the impact of carbon emissions on various financial and non-financial corporate metrics. Conversely, laggards are seldom capable of carrying out one or two of these tasks and lack an overall strategic approach to managing their impact on climate. Thus, while laggards are merely able to measure their impact on climate, leaders are effectively managing it.

Within the context of the ongoing debate on the merits of introducing a comprehensive global tax system<sup>6</sup> to curb carbon emissions, a company's ability to manage its emissions could translate into an economic advantage in the near future. For instance, in order to achieve its 2020 greenhouse gas abatement goals, the European Union has in-

"Within the context of the ongoing debate on the merits of introducing a comprehensive global tax system to curb carbon emissions, a company's ability to manage its emissions could translate into an economic advantage in the near future."





<sup>&</sup>lt;sup>6</sup> http://ec.europa.eu/clima/policies/ ets/index en.htm

"Innovation continues to play a key role, particularly for a knowledge and research-driven industry such as the chemical sector." troduced a trading system designed to encourage carbon emission reductions by assigning a price to each unit of emissions. As this scheme is expected to go into effect for some sub-sectors of the chemical industry as early as 2013, companies that can effectively manage their emissions will see a positive impact in their bottom line profitability and will have a competitive advantage over those that do not.

# **Standards for Suppliers**

When analyzing the results in standards for suppliers, both leaders and laggards report relatively robust guidelines for monitoring their suppliers from an economic, social and environmental perspective. Leaders nevertheless outperform laggards when it comes to managing a comprehensive auditing program or the handling of non-compliance. The financial materiality of this sustainability factor is straightforward: proactive engagement with suppliers and the effective management of non-compliance can prevent reputational damage and unwanted or unexpected costly corrective actions.

<sup>7</sup> Accenture, "Sustainability Strategies for High Performance in the Chemicals Industry" page 12. http://www.accenture.com/us-en/ Pages/insight-chemical-executiveseries-driving-sustainability-summary.aspx

# **Human Capital Development**

Because human ingenuity is the primary ingredient for innovation, chemical companies have always sought to attract and retain the best talent. This has not always been an easy task given the level of public distrust that has accompanied the industry in the past. While it is not surprising that executives in the chemical industry recently acknowledged the role of a company's sustainability profile in attracting talent,<sup>7</sup> it can be argued that effective processes to ensure the development of human capital also contribute to the retention of talented employees.

In the field of human capital development, sustainability leaders demonstrate the ability to implement thorough skill mapping and develop processes that cover all employee categories. In contrast, the laggards often do not include top management in this activity. Furthermore, an analysis of the data from the CSA reveals that leaders foster environments that encourage broad organizational learning, while laggards lack appropriate channels to transfer know-how within the company. Finally, by developing an effective set of performance indicators, sustainability leaders can more effectively track and manage their ability to attract and retain a talented workforce.

#### 3.4 CONCLUSION

By analyzing the gaps between sustainability leaders and laggards according to selected criteria within the SAM CSA, we have identified some of the specific factors that differentiate the sustainability leaders from the laggards in the chemical industry.

Both leaders and laggards achieve high scores in the more traditional sustainability measures such as corporate governance, occupational health & safety and environmental policy, largely as a result of customer demand and the industry's long-standing efforts to tackle sustainability issues. Although these results represent a great achievement for the chemical industry in its efforts to adopt industrywide sustainable practices, they also suggest that such criteria alone and in their current form can no longer help distinguish the sustainability leaders from the laggards. As SAM continuously seeks to enhance its methodology, these results suggest that a review of these criteria is necessary in order to help understand whether more specific factors within these traditional sustainability criteria still differentiate the leaders from the laggards.

For the innovation management criteria, however, the data showed a wide gap in average scores between leaders and laggards. This confirms the notion that innovation continues to play a key role, particularly for a knowledge and research-driven industry such as the chemical sector. The

chemical industry has been successfully introducing innovations for over a century, and in order for chemical companies to remain competitive, they will need to continue to innovate to realign their product portfolios towards sustainable products and processes. Adopting green chemistry principles and effectively managing products and projects based on their life cycle assessment will need to become standard practice. Rising personnel and registration costs will favor an open approach to innovation, which involves initiatives ranging from outsourcing, bolt-on technology acquisitions, collaborations with stakeholders across the value chain, as well as the spin-off or sale of non-core activities.

In line with the management maxim of "what gets measured gets managed," Accenture<sup>8</sup> reported that measurement is a key reflection of a company's sustainability initiatives in the chemical industry, as it enables companies to monitor their progress on the quantitative aspects of sustainability reporting such as emission or waste production. Our analysis of chemical companies' performance reveals that not only do sustainability leaders measure their exposures to sustainability risks, but more importantly, they also manage them. Thus, by implementing comprehensive strategies to actively manage their exposures to sustainability risks and opportunities, companies can emerge as sustainability leaders and further widen the gap relative to the sustainability laggards.

"Our analysis of chemical companies' performance reveals that not only do sustainability leaders measure their exposures to sustainability risks, but more importantly, they also manage them."

<sup>8</sup> Accenture, "Sustainability Strategies for High Performance in the Chemicals Industry" page 12. http://www.accenture.com/us-en/ Pages/insight-chemical-executiveseries-driving-sustainability-sum-

# 4. Interview with Frans van Houten, President and Chief Executive Officer, Royal Philips Electronics

"We are firmly convinced that the only way to truly achieve breakthroughs is if the requirement of sustainability comes at the very beginning of the product creation process."

Why is innovation important to companies? We spent thirty minutes with Frans van Houten, President and Chief Executive Officer at Royal Philips Electronics, to learn why innovation is central to his company's mission, and to find out how Philips integrates sustainability into its overall innovation management strategy.



**Frans van Houten**President and Chief Executive Officer,
Royal Philips Electronics

Mr. van Houten, thank you very much for taking the time to share a few of your thoughts on sustainability and innovation with us. Let's begin with sustainability drivers. What are the main drivers of innovation at Philips, and how do you identify opportunities for innovation?

Frans van Houten: Sure. Both the topics of sustainability and innovation are absolutely close to our heart. So, let me try to give you a picture. I think everything begins with the mission that we have set for ourselves as a company. Sustainability and innovation cannot be an afterthought. They are an integral part of what we are, who we are and how we operate. In our mission we talk about "meaningful innovation to improve people's lives." So you can see already that we take both the words innovation as well as the impact on society into account in everything we do. We have chosen to operate

in three large markets that are influenced by societal trends and where we see a big need to act responsibly.

In healthcare, we see a world that is driven by a growing population, more chronic diseases, people that are getting older and healthcare costs that are spiraling out of control. And in that world, we've stated that we want to touch more than 500 million people and improve their lives, and do so in a manner that has better outcomes for patients while making healthcare more affordable—also for those at the base of the socio-economic pyramid. So we are active in the healthcare market, which is highly relevant for the world, and within that, Philips has a social mission to reach a larger part of society in every part of the world. That is one big part of our business where you can see that innovation and sustainability have been interwoven into the entire mission.

In the area of lighting, it's a similar story. We see a world in which many people still don't have access to lighting, who cannot be schooled, but who want to improve their quality of life. At the same time lighting is responsible for more than 20% of the world's energy consumption. This, again, is spiraling out of control. The only way to have sustainable lighting in the world is to combine energy efficiency with making lighting accessible and available to all people. We have set ourselves the goal of reducing the average energy consumption of our product portfolio by 50%, enabled by innovation in technology.

In the third pillar of our business, we talk about the health and well-being of the consumer—in the daily life of the average person. We focus our product range on helping people live a healthy lifestyle, for example, through oral care, personal care and healthy food, all of which will make people happy, but also healthier. And we make that available both for the upscale segments as well as for the other segments of the market.

So we have chosen to play in businesses that are congruent to our mission. We would prefer not to be in businesses where we would see a conflict with our commitment to improving people's lives. It's interesting that when you look deep into the history of the company, my predecessors and the people who founded Philips were already very engaged in improving people's lives. Philips used to build schools and set up sports clubs for its employees, essentially embracing social responsibility. You could say that this heritage makes us even more conscious of our responsibility towards sustainability. So it's not a fad of the last few years, it's something that we have been doing forever, and in a more organized manner for almost 20 years, as we started with structural eco-design already in the beginning of the 1990's. And again, eco-design combines the process of innovation with our commitment to sustainability. We are firmly convinced that the only way to truly achieve breakthroughs is if the requirement of sustainability comes at the very beginning of the product creation process. So it's not something we do after the fact. It is an upfront requirement.

Regarding stakeholder engagement and involvement, how do you integrate the point of views of your stakeholders into your innovation strategy?

van Houten: Again, I go back to our mission: "meaningful innovation to improve people's lives." Now, what is meaningful? The word "meaningful" was carefully chosen. You cannot do this only from within the inner core of your company. You need to reach out to people; you need to involve people so that whatever you do in terms of innovation is meaningful to them. We have several ways of doing that. First of all we, of course, involve the customers. But customers do not always know what they want, and therefore you need to have a wider process. So we partner in open innovation programs with universities, NGOs and with individuals on the Internet through what is often referred to as crowd sourcing. So you can actually discuss your ideas about societal needs and breakthroughs in sustainability with a lot of people and together, you kind of prototype and come to better ideas or meaningful innovation.

To give you a few numbers, our R&D people are in many different locations throughout the world. In the US, Europe, China, India and in several other places, we have centers of innovation, which in their own right bring us in closer touch with those markets. We have partnerships with about 250 universities. We have more than 2,000 partnerships in various open innovation programs, with both small and medium-sized enterprises. And with crowd sourcing, we can easily have the input from

"You need to reach out to people; you need to involve people so that whatever you do in terms of innovation is meaningful to them." a few hundred thousand people on a specific subject. You know, Facebook, Twitter and other social media can be really helpful there. You can rapidly share ideas and get immediate feedback. So this kind of open innovation approach that touches so many different people will make us more relevant in achieving breakthroughs.

You mentioned your research centers in China, India and other emerging economies. How important are emerging markets as a source of innovation? Do you have examples of innovations developed in response to specific challenges in the emerging markets that were later applied to other global markets?

van Houten: We have an innovation model that revolves around the insights of the market. And these can come from many different sources. They can come from marketing or from research people, and we typically involve people from many countries in the gathering of these insights.

The allocation of projects is also an interesting discussion. Ten years ago, we would have treated the Bangalore R&D facility as an execution arm, you know, as cheap labor, basically saying: "Well, you execute someone else's ideas." This has totally changed. Now, they are a full partner, and complete product responsibility can be placed in our R&D facility in Bangalore. Not only is the execution carried out there, but also the inception or innovation ideation. So by giving them responsibility both for the local market but also for developing ideas that can be exported to our other markets, we find that we come to better ideas if we have a distributed environment. I like to see Philips as a networked organization. It's not a centrally controlled organization but more of a network in which people throughout the organization collaborate in knowledge networks.

One example is our range of food cleaning products used for the removal of pesticides from fruits and vegetables, developed in China. That's a typical innovation based on local insights developed for the local situation, and will also become available in other markets.

Another example is the blanket for jaundice, which combines a blanket with blue LED lights for the treatment of jaundice in infants. Its portability allows infants to be treated for jaundice at home, allowing the baby to be comforted by the parent during treatment. It also reduces stress to the baby, and reduces hospital visits and medical costs. That idea also came out of Bangalore in India and again, those products will become available globally.

From the corporate perspective, how do you monitor the innovation process as all these local entities provide inputs to innovation? Do you have a formalized innovation management process that steers your innovation projects? How do you integrate the needs of emerging markets into your innovation process, and how do you balance them against the needs of the firm?

van Houten: We operate a business market matrix for the company, in which the market teams in the various markets throughout the world have direct influence on the roadmap of the products that we create. Of course, there can be more demand for new products than we can afford to make, so we need to prioritize our resources. But, basically, all the markets have a voice. And then we manage our project portfolio to determine which ideas fit our strategy and mission. So it's a bottom-up / top-down combination, where we look at the ideas and the local market requirements versus the company strategy. We also have a stated priority to penetrate the emerging markets, and we use that as a criterion to determine which projects are prioritized. So we

measure how much we penetrate the emerging markets and what percentage of our activities is in those markets versus the mature markets.

Likewise, we measure projects against our sustainability criteria. For example, we want to make progress on our EcoVision<sup>1</sup> program every year. This means that the proposed products and solutions need to fit our stringent sustainability criteria, both in terms of green products as well as in terms of reaching the middle and lower classes of society, so that we have a balanced portfolio and make progress every year to improve on our EcoVision targets.

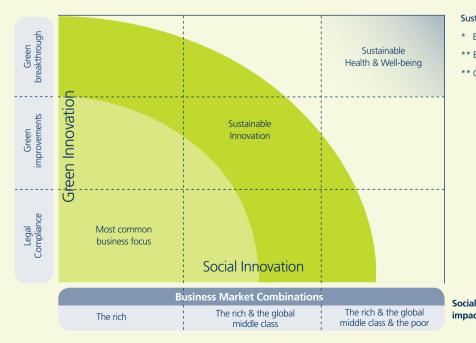
Do you view sustainability, and more specifically innovation, as a means to comply with regulations, or is it primarily a means to stay ahead of your competitors? Or do you see yourselves as driving the market/setting the standard for certain areas?

van Houten: Actually, we do both; it's always good to learn from your competitors, but in our strategic road mapping we use a five- to ten-year horizon and an innovation portfolio mapping tool in which we push the boundaries of what is possible. On one axis, we push the barrier on green breakthroughs, and on the other axis we look at business market combinations, in other words, what part of the population do we reach? As I mentioned in the beginning, we have a goal to touch more than 500 million people with healthcare, and to do that, we cannot look at the competition. We need to look at what our society needs and how we can achieve that. Some of the breakthrough innovations are actually at the frontier of both axes in this tool. So we have a very active ideation process that searches for the breakthroughs on green and social innovation.

<sup>1</sup> The Philips EcoVision program is the fifth structural program of a series started in 1994. The main target is to increase sales from Green products up to 50% of total sales in 2015. Next to that, three leadership KPIs have been defined, bringing Philips' competencies to bear, namely: 'care, 'energy efficiency' and 'materials.' Corresponding targets for 2015 are respectively 500 million lives touched, 50% energy efficiency improvement of Philips products and double recycled content in products and global collection and recycling amounts, compared to 2009.

FIGURE 1: THE PHILIPS SUSTAINABLE INNOVATION PORTFOLIO MAPPING TOOL Source: Philips

# **Environmental** impact\*\*



# Sustainability Leadership KPIs

- \* Bringing care to pepople
- \*\* Energy efficiency of products
- \*\* Closing the material loop

impact\*

# sam Interview

"Interestingly, the profitability of our green products is on average higher than that of the traditional products." And of course, products have to be compliant. We try to improve the environmental aspects of a product, but a real breakthrough can be, for example, the lighting example at our recent innovation exhibition, in which we deliver energy efficient LED street lighting that is automatically dimmed, depending on the circumstances, traffic intensity, and can also be controlled from a distance in case of an accident, when more light is needed at the spot. Furthermore, we are experimenting with different financing concepts, such as pay-perlux and pay-by-the-mile. In those concepts, energyefficient solutions are combined with different financing models. We also have the option to maintain the ownership of the equipment. This provides us the possibility to close loops, reuse parts and materials during upgrading or renewal. That's really a kind of breakthrough thinking from an environmental perspective.

So, it's no longer simply about selling a product; it's selling an outcome, a solution. We remain responsible for a product, and in certain business models, upgrade it or even take it back when our customer requires so.

# From the perspective of the CFO and in terms of financial materiality, at what point do cost-return criteria come into play during the innovation management process?

van Houten: You need to make money, otherwise you cannot deliver on your mission, right? But at the highest level, and to our shareholders, we have declared that we would measure ourselves on both financial and non-financial parameters. The financial ones are typically sales, profitability and return on invested capital. However, the non-financial parameters include a measure of sustainability, measured through our EcoVision program results. We make that visible to our shareholders and it

also determines my own evaluation and that of my Board Members. Therefore, the financial return alone is not the only criterion at the highest level in the company. And there we have deployed the same set of balanced measures throughout the company. Related to that, we have said to our shareholders that we are in this game for longterm value creation and not for quarterly earnings. I've also said to the market, it may well be that we actually miss a quarter or two as long as we reach our longer-term goals, to get away from shortterm, opportunistic behavior. If we were too shortterm oriented, then suddenly we would no longer be involved in many of these programs. There's also a benefit to being very opportunistic, but we've said consciously that we don't want to have that kind of behavior in our company.

# How do you decide whether to move forward with an innovation idea? Do you use a mix of financial and sustainability criteria?

van Houten: Yes, and our sustainability criteria often have priority over short-term financials as our brand value would be harmed if we deviate from our mission. But interestingly, the profitability of our green products is on average higher than that of the traditional products.

# Regarding innovation outputs, how do you measure the success of an innovation? What are some of the tools and targets you use to track success?

van Houten: We have a lot of KPIs/performance indicators that are part of our EcoVision program. For example, in healthcare, we measure the number of people that we touch through our healthcare solutions. In terms of energy efficiency—again an output—we can compute what the installed

base of our lighting products consumes in terms of energy. And in our EcoVision program, we have said that we want to reduce the energy consumption of our products by 50% by 2015. We have objectives on the closed loop of materials and recycling: the cradle-to-cradle thinking. We also have a target to double global collection/recycling of our products by 2015. Again, compared to 2009, that's a doubling in just 6 years. Of course, those are lagging indicators; they are outcomes or results.

We also have measures that we use in our innovation pipeline. We ask ourselves whether the product we are developing meets our internal EcoVision or sustainability requirements. We look at the cross-fertilization of innovative ideas. For example, lighting influences the learning of children in schools. Through better lighting we can achieve better learning. That is different in Africa than in the mature markets. In Africa, we just bring light and people can study. In the Western world, we see a lot of kids with ADHD2, that is, restlessness. Lighting can actually influence that by calming down the child and making him more susceptible to learning. So there are many ways to do this and as I mentioned earlier, we also use the innovation portfolio mapping tool to evaluate our innovation projects to determine whether they represent enough of a breakthrough, and to measure our success in achieving breakthroughs.

Do you track progress on your innovations according to the UN Human Development Index<sup>3</sup> indicators and do you communicate this to your stakeholders? How do you communicate the impact of your activities on local communities?

van Houten: We use Leadership KPIs that we developed along the ecological axis but also on

the social axis of our innovation mapping tool. In fact, on the social axis we've used the Human Development Index. But obviously, for a company to measure its impact on a country's total UN Human Development Index is relatively difficult, which you will understand, it's also quite small. Nevertheless, we are also part of the UN Global Compact. We report on what Philips has been doing towards achieving the Millennium Development Goals, and have been doing so for four years now. So these are some of the more concrete elements that we communicate publicly.

# Beyond innovation, what are some of the key sustainability challenges that Philips is facing today?

van Houten: Almost 70% of our business is business-to-business sales and 30% is directly to the consumer. In the business-to-business segment, you meet people that apply short-term criteria when deciding what product to buy. We take a much more holistic view, and we would like people to judge based on total cost of ownership, including the environmental impact, and use that as a decision-making criterion. If they did so, then people would reach different investment decisions. For example, when you choose a lighting solution for the street, maybe the initial cost of the more energyefficient option is higher, but because of the energy savings and the economic and environmental impact, it is still a better decision and over the life of the product it would become more cost effective. But not every community or government applies these types of integral, holistic decision-making criteria. So in terms of challenges, I think we all need to help the world see the light in what is the best way to sustainable investment decision making. So I think that's still a challenge. We engage in a lot of stakeholder dialogue so that together, we educate the world.

<sup>2</sup> ADHD: Attention Deficit Hyperactivity Disorder

<sup>3</sup> UN Human Development Index: a measure of a country's achievements based on economic, health and social indicators, using measures such a GDP per capita, life expectancy, education and literacy rates.

# sam Interview

Finally, you have been participating in the SAM Corporate Sustainability Assessment for a number of years now—how do you benefit from participating in the Assessment and how does it help you as a firm to set targets and compare yourselves to your peers?

van Houten: There's a lot of value in participating in benchmarks, in dialogs with all the stakeholders as it helps educate the world about the importance of sustainability. But it also keeps us honest, and it helps us push the envelope more. Engagement is important. It drives behavior. So if we don't talk about sustainability, hey, maybe we would forget it. With 120,000 employees, we need to make sure that the topic is continually alive, both internally and externally. So benchmarking and participating in all these initiatives is tremendously important to us.

# 5 SAM SECTOR LEADERS 2012



# 5. SAM Sector Leaders 2012

Company	Sector	Country
adidas AG	Clothing, Accessories & Footwear	Germany
Air France-KLM	Airlines	France
Alcatel-Lucent	Communication Technology	France
Alcoa Inc.	Aluminum	United States
AMEC plc	Oil Equipment & Services	United Kingdom
Amorepacific Corp.	Personal Products	South Korea
Au Optronics Corp.	Computer Hardware & Electronic Office Equipment	Taiwan
Baxter International Inc.	Medical Products	United States
Benesse Holdings Inc.	Specialized Consumer Services	Japan
BMW AG	Automobiles	Germany
British American Tobacco plc	Tobacco	United Kingdom
DSM N.V.	Chemicals	Netherlands
EDP - Energias de Portugal S.A.	Electricity	Portugal
Electrolux AB	Durable Household Products	Sweden
Embraer S.A.	Aerospace & Defense	Brazil
Enagas S.A.	Gas Distribution	Spain
Fiat Industrial S.p.A.	Industrial Engineering	Italy
Fibria Celulose S.A.	Forestry & Paper	Brazil
Henkel AG & Co. KGaA	Nondurable Household Products	Germany
Herman Miller Inc.	Furnishing	United States
Hyundai Engineering & Construction Co., Ltd.	Heavy Construction	South Korea
Itausa-Investimentos Itau S/A	Financial Services	Brazil
J Sainsbury plc	Food & Drug Retailers	United Kingdom
KT Corp.	Fixed Line Communications	South Korea
Lite-On Technology Corp.	Electric Components & Equipment	Taiwan
Lotte Shopping Co. Ltd.	General Retailers	South Korea
Marubeni Corp.	Support Services	Japan
Nalco Holding Co.	Waste & Disposal Services	United States
Novozymes A/S	Biotechnology	Denmark
Pearson plc	Media	United Kingdom
PepsiCo Inc.	Beverages	United States
Philips Electronics N.V.	Leisure Goods	Netherlands
Pirelli & C. S.p.A.	Auto Parts & Tires	Italy
PostNL	Industrial Transportation	Netherlands
Rautaruukki Oyj	Steel	Finland
Repsol YPF S.A.	Oil & Gas Producers	Spain
Roche Holding AG	Pharmaceuticals	Switzerland
Samsung Electronics Co. Ltd.	Semiconductors	South Korea

Company	Sector	Country
Samsung SDI Co. Ltd.	Electronic Equipment	South Korea
SAP AG	Software	Germany
Sekisui Chemical Co. Ltd.	Home Construction	Japan
Siam Cement Pcl	Building Materials & Fixtures	Thailand
Siemens AG	Diversified Industrials	Germany
SK Telecom Co., Ltd.	Mobile Telecommunications	South Korea
Sodexo S.A.	Hotels, Restaurants, Bars & Recreational Services	France
Sonoco Products Co.	Containers & Packaging	United States
Stockland	Real Estate	Australia
Swiss Re	Insurance	Switzerland
TABCorp Holdings Ltd.	Gambling	Australia
Teradata Corp.	Computer Services & Internet	United States
TransCanada Corp.	Pipelines	Canada
TUI AG	Travel & Tourism	Germany
Unilever N.V.	Food Producers	Netherlands
United Utilities Group plc	Water	United Kingdom
UnitedHealth Group Inc.	Healthcare Providers	United States
Vestas Wind Systems A/S	Renewable Energy Equipment	Denmark
Westpac Banking Corp.	Banks	Australia
Xstrata plc	Mining	Switzerland



# 6. SAM Sector Movers 2012

Company	Sector	Country
3M Company	Diversified Industrials	United States
ACS Actividades de Construccion y Servicios S.A.	Heavy Construction	Spain
Alcatel-Lucent	Communication Technology	France
Alcoa Inc.	Aluminum	United States
Amgen Inc.	Biotechnology	United States
Asahi Glass Co. Ltd.	Building Materials & Fixtures	Japan
AstraZeneca plc	Pharmaceuticals	United Kingdom
Autodesk Inc.	Software	United States
Benesse Holdings Inc.	Specialized Consumer Services	Japan
Bombardier Inc.	Aerospace & Defense	Canada
British American Tobacco plc	Tobacco	United Kingdom
Capita Group plc	Support Services	United Kingdom
Compass Group plc	Hotels, Restaurants, Bars & Recreational Services	United Kingdom
ConAgra Foods Inc.	Food Producers	United States
Daimler AG	Automobiles	Germany
Danske Bank A/S	Banks	Denmark
Delta Electronics Inc.	Electronic Equipment	Taiwan
Dongbu Insurance Co. Ltd.	Insurance	South Korea
Electrolux AB	Durable Household Products	Sweden
Elekta AB	Medical Products	Sweden
EMC Corp.	Computer Hardware & Electronic Office Equipment	United States
Enagas S.A.	Gas Distribution	Spain
Fibria Celulose S.A.	Forestry & Paper	Brazil
Fraport AG	Industrial Transportation	Germany
Galp Energia, SGPS, S.A.	Oil & Gas Producers	Portugal
Henkel AG & Co. KGaA	Nondurable Household Products	Germany
Hennes & Mauritz AB	General Retailers	Sweden
Herman Miller Inc.	Furnishing	United States
Hyundai Mobis Co. Ltd.	Auto Parts & Tires	South Korea
Iberdrola S.A.	Electricity	Spain
J Sainsbury plc	Food & Drug Retailers	United Kingdom
Keppel Land Ltd.	Real Estate	Singapore
Kinross Gold Corp.	Mining	Canada
KT Corp.	Fixed Line Communications	South Korea
Ladbrokes plc	Gambling	United Kingdom
Lanxess AG	Chemicals	Germany
LG Electronics Inc.	Leisure Goods	South Korea
LG Household & Health Care Ltd.	Personal Products	South Korea

Company	Sector	Country
Lite-On Technology Corp.	Electric Components & Equipment	Taiwan
MAN SE	Industrial Engineering	Germany
Molson Coors Brewing Co.	Beverages	United States
Morgan Stanley	Financial Services	United States
Nalco Holding Co.	Waste & Disposal Services	United States
Qantas Airways Ltd.	Airlines	Australia
Rautaruukki Oyj	Steel	Finland
Samsung Electronics Co. Ltd.	Semiconductors	South Korea
Sekisui Chemical Co. Ltd.	Home Construction	Japan
SK C&C Co. Ltd.	Computer Services & Internet	South Korea
SK Telecom Co., Ltd.	Mobile Telecommunications	South Korea
Sonoco Products Co.	Containers & Packaging	United States
Suez Environnement S.A.	Water	France
Technip S.A.	Oil Equipment & Services	France
Telenet Group Holding N.V.	Media	Belgium
TransCanada Corp.	Pipelines	Canada
TUI Travel plc	Travel & Tourism	United Kingdom
UnitedHealth Group Inc.	Healthcare Providers	United States
Vestas Wind Systems A/S	Renewable Energy Equipment	Denmark
Woongjin Chemical Co. Ltd.	Clothing, Accessories & Footwear	South Korea



# 7. Sector Insights: 58 Sectors at a Glance

Since 1999, SAM has been assessing and documenting the sustainability performance of over 2,000 corporations on a yearly basis. In the process, SAM has compiled one of the largest global databases on corporate sustainability.

The world's 2,500 largest companies (based on the Dow Jones Global Total Stock Market Index) are invited to participate in SAM's Corporate Sustainability Assessment every year. Only the top 15% from each of the 58 SAM sectors qualify for inclusion in The Sustainability Yearbook.

On the following pages, SAM offers insights high-lighting opportunities and risks deriving from economic, environmental and social trends and developments that have an impact on the competitive position of companies in each of the 58 sectors analyzed. Not only are the top 15% of the companies from each sector included in The Sustainability Yearbook, but they are also classified into three categories: SAM Gold Class, SAM Silver Class and SAM Bronze Class. In addition, a Sector Leader and a Sector Mover are identified for each sector.

SAM is pleased to see that over the years participation rates in the SAM Corporate Sustainability Assessment have continuously risen, indicating that sustainability is increasingly rising to the top of corporate agendas and becoming more mainstream. Thus, in an effort to continuously raise the sustain-

ability bar, the eligibility criteria for receiving one of the three SAM distinctions have been strengthened, further highlighting the significance of each medalist's sustainability achievements. As a result, although a greater total number of companies was eligible for inclusion in The Sustainability Yearbook, a smaller percentage has received one of the three SAM awards.

Finally, a qualitative screen has been introduced based on SAM's Media & Stakeholder Analysis (MSA) process, which evaluates a company's response to critical sustainability issues that may arise. This aligns eligibility for inclusion in the Year-book with any decision by the DJSI Design Committee to exclude a company from the DJSI, which is also based on the MSA.



For each sector, the company with the highest score is named the SAM Sector Leader. This company is considered to be the one within its sector that is best prepared to seize the opportunities and manage the risks deriving from economic, environmental and social developments.



Companies whose score is within 1% of the Sector Leader's score receive the SAM Gold Class award. Consistent with our "Best–in–Class" methodology, the Sector Leader from each sector also receives the SAM Gold Class distinction, meaning that each of the 58 sectors has at least one gold medalist.



All companies receiving a score within a range of 1% to 5% from the score of the Sector Leader receive the SAM Silver Class distinction.



Companies whose score is within a range of 5% to 10% from the score of the Sector Leader receive the SAM Bronze Class distinction.



Within the top 15% of each sector, the company that has achieved the largest proportional improvement in its sustainability performance compared to last year is named the SAM Sector Mover.

# **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

	Company	Country
SAM Gold Class	Company*	Country
	Company	Country
SAM Silver Class	Company	Country
	Company**	Country
SAM Bronze Class	Company	Country

\* SAM Sector Leader \*\* SAM Sector Mover the top of the table. The other companies follow in alphabetical order. Out of the total of 433 companies listed in this yearbook, the following distinctions were awarded:

The SAM Sector Leader appears at

87 SAM Gold Class

41 SAM Silver Class

92 SAM Bronze Class

# **Reading Instructions**

The information below provides an explanation on how to interpret the various sections contained in each of the Sector Insights on the following pages.

# **DRIVING FORCES**

Highlights current and future challenges shaping the competitive landscape of each sector.

# **HIGHLIGHTED CRITERIA**

Highlight of both sector-specific and general criteria applied in the 2011 SAM Corporate Sustainability Assessment.

# SECTOR STATISTICS

This section displays the research coverage in 2011 for the respective sector.

# **RESULTS AT SECTOR LEVEL**

Offers an overview of the 2011 SAM Corporate Sustainability Assessment scores. For each sector the average and the best score of the assessed companies are displayed, as well as the average score and the top score for the economic, environmental and social dimensions. The relative weight assigned to each of the three dimensions is also shown.



# Aerospace & Defense

# **DRIVING FORCES**

In the commercial airline space, the convergence of economic and regulatory incentives has strengthened the link between environmental and economic performance. As a result, there has been a sustained push for products and technologies that lead to lower emissions and energy consumption, higher overall efficiency and lower operating and maintenance costs. This trend is likely to persist regardless of future macroeconomic developments, providing an incentive for continued innovation.

On the weaponry and defense side of the business, the current geopolitical situation has led to an increase in both traditional and new security challenges that call for more flexible and intelligent technologies as well as solutions providing for better integration of systems and resources. Given the increasing focus on reputational and LTO (license to operate) issues, companies exposed to the industry's civilian and defense segments need to pay extra attention to local and international regulatory and ethical issues.

#### HIGHLIGHTED CRITERIA

# ECONOMIC DIMENSION

- Corporate Governance
- Customer Relationship Management
- Risk & Crisis Management
- Supply Chain Management

# ENVIRONMENTAL DIMENSION

- Environmental Reporting
- Product Impact
- Product Stewardship
- Climate Strategy

#### SOCIAL DIMENSION

- Human Capital Development
- Stakeholder Engagement
- Standards for Suppliers
- Talent Attraction & Retention

# **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

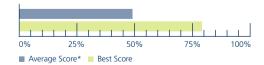
	Company	Country
SAM Gold Class	Embraer S.A. *	Brazil
	Bombardier Inc. **	Canada
	Finmeccanica S.p.A.	Italy
	Rolls-Royce Group plc	United Kingdom
SAM Bronze Class	United Technologies Corp.	United States

<sup>\*</sup> SAM Sector Leader

# **SECTOR STATISTICS**

Number of companies in universe	31
Number of companies assessed by SAM in 2011	19
Assessed companies to total companies in universe (%)	61
Market capitalization of assessed companies to total market capitalization (%)	86

# **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	60%	88%	32%
Environmental	43%	88%	27%
Social	46%	78%	41%

<sup>\*</sup> Average score of all assessed companies in the sector

<sup>\*\*</sup> SAM Sector Mover



# **Airlines**

# **DRIVING FORCES**

The airline industry has started to recover from its extended slowdown. In recent years, declining business travel and rising fuel prices have put pressure on companies to reduce costs, redesign route networks and increase fuel efficiency. Regulatory pressure continues to force airlines to reduce their CO<sub>2</sub> emissions and invest in fuel-saving measures such as refitting airplanes with winglets, light-weight materials and advanced route-planning technology. Through increased cooperation with governments, aircraft manufacturers and developers of alternative fuels, airlines can reduce their exposure to rising fuel prices and improve their environmental performance. Airlines that can capitalize on such alliances will be able to offer their customers the most competitive prices and efficient routes. The EU Emissions Trading Scheme (ETS), which will take effect in 2012 and will affect virtually all airlines with operations to, from and within Europe, offers airlines another incentive to reduce their emissions and increase their operating efficiency.

# **HIGHLIGHTED CRITERIA**

### ECONOMIC DIMENSION

- Brand Management
- Corporate Governance
- Reliability
- Risk & Crisis Management

#### ENVIRONMENTAL DIMENSION

- Fleet Age
- Local Air Quality
- Environmental Policy/ Management System
- Route Network

# SOCIAL DIMENSION

- Human Capital Development
- Noise
- Standards for Suppliers
- Talent Attraction & Retention

# **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

	Company	Country
SAM Gold Class	Air France-KLM *	France
SAM Silver Class	Qantas Airways Ltd. **	Australia
SAM Bronze Class	Deutsche Lufthansa AG	Germany

# **SECTOR STATISTICS**

Number of companies in universe	19
Number of companies assessed by SAM in 2011	13
Assessed companies to total companies in universe (%)	68
Market capitalization of assessed companies to total market capitalization (%)	80

# **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	62%	91%	36%
Environmental	56%	84%	30%
Social	53%	80%	34%

<sup>\*</sup> Average score of all assessed companies in the sector

<sup>\*</sup> SAM Sector Leader \*\* SAM Sector Mover



# **Aluminum**

# **DRIVING FORCES**

Energy consumption and climate change remain two of the most pressing issues facing the aluminum industry. Today, coal and hydro dominate the energy source of aluminum production. Although specific power consumption (MWh/t) has been halved over the past 10 years, smelting remains a very energy-intensive process that uses considerably more energy than steel production. This ecological disadvantage is partly offset by the significantly lower specific weight of aluminum and the moderate energy input required for aluminum recycling. Nevertheless, further decreases in specific energy consumption and greenhouse gas emissions from anode consumption remain a key challenge. In terms of social sustainability, occupational health and safety dominate the agenda. However, as aluminum producers are becoming vertically integrated, they are also increasingly faced with other sustainability issues such as stakeholder engagement and mineral waste management.

#### HIGHLIGHTED CRITERIA

# ECONOMIC DIMENSION

- Codes of Conduct/ Compliance/ Corruption & Bribery
- Corporate Governance
- Transparency
- Risk & Crisis Management

# **ENVIRONMENTAL DIMENSION**

- Biodiversity
- Climate Strategy
- Environmental Policy/ Management System
- Environmental Reporting

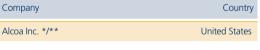
#### SOCIAL DIMENSION

- Human Capital Development
- Occupational Health & Safety
- Social Impacts on Communities
- Standards for Suppliers

# **SUSTAINABILITY LEADERS 2012**

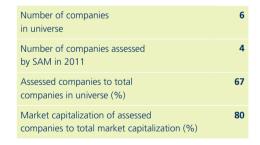
As of December 31, 2011

SAM Gold Class

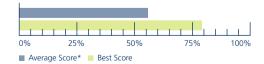


# \* SAM Sector Leader

# **SECTOR STATISTICS**



# RESULTS AT SECTOR LEVEL



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	58%	84%	26%
Environmental	51%	79%	31%
Social	57%	84%	43%

<sup>\*</sup> Average score of all assessed companies in the sector



# **Auto Parts & Tires**

# **DRIVING FORCES**

Intense competition in the automotive sector requires suppliers of auto parts & tires to offer an attractive range of high-quality products, preferably with environmental benefits. At the same time, increasing competitive and margin pressure forces auto parts & tires companies to continually reduce their cost base and regularly launch new, innovative products. This makes excellence in human capital development, talent attraction and retention a key success factor. Supply chain management is another important challenge as outsourcing to low-cost countries can increase companies' exposure to human rights violations and other supply issues.

# **HIGHLIGHTED CRITERIA**

# ECONOMIC DIMENSION

- Brand Management
- Codes of Conduct/ Compliance/ Corruption & Bribery
- Corporate Governance
- Risk & Crisis Management

# **ENVIRONMENTAL DIMENSION**

- Climate Strategy
- Emission Products
- Environmental Policy/ Management System
- CO<sub>2</sub> from Logistics

#### SOCIAL DIMENSION

- Human Capital Development
- Stakeholder Engagement
- Standards for Suppliers
- Talent Attraction & Retention

# **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

	Company	Country
SAM Gold Class	Pirelli & C. S.p.A. *	Italy
SAM Silver Class	Johnson Controls Inc.	United States
SAM Bronze Class	Hyundai Mobis Co. Ltd. **	South Korea
	Michelin	France
	Bridgestone Corp.	Japan
	Denso Corp.	Japan
	NSK Ltd.	Japan

<sup>\*</sup> SAM Sector Leader \*\* SAM Sector Mover

# SECTOR STATISTICS

Number of companies in universe	43
Number of companies assessed by SAM in 2011	19
Assessed companies to total companies in universe (%)	44
Market capitalization of assessed companies to total market capitalization (%)	67

# **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	59%	89%	23%
Environmental	50%	94%	37%
Social	52%	90%	40%

 $<sup>\</sup>ensuremath{^{\star}}$  Average score of all assessed companies in the sector



# **Automobiles**

# **DRIVING FORCES**

The key challenge faced by automotive companies is the need to define and implement a clear market positioning strategy in an environment characterized by overcapacities, cut-throat competition and cost pressure (through higher R&D and raw material costs). Given increasingly tight regulations on greenhouse gas emissions and air pollutants, as well as the sector's reliance on oil, carmakers need to improve fuel efficiency and lower the carbon intensity of their product portfolio by introducing alternative propulsion systems (such as electric motors). In this respect, talented, skilled and motivated employees are directly responsible for bringing companies forward in terms of innovative products, higher efficiencies and production quality. This makes it indispensable for companies to employ progressive human resources policies that include talent attraction and retention, human capital development, occupational health & safety and group-wide ethical principles.

#### HIGHLIGHTED CRITERIA

# ECONOMIC DIMENSION

- Brand Management
- Codes of Conduct/ Compliance/ Corruption & Bribery
- Corporate Governance
- Risk & Crisis Management

#### **ENVIRONMENTAL DIMENSION**

- Climate Strategy
- Low Carbon Strategy
- Environmental Policy/ Management System
- CO<sub>2</sub> from Logistics

#### SOCIAL DIMENSION

- Human Capital Development
- Stakeholder Engagement
- Standards for Suppliers
- Talent Attraction & Retention

# **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

SAM Gold Class

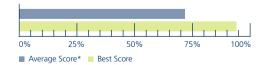
Company	Country
BMW AG *	Germany
Daimler AG **	Germany
Fiat S.p.A.	Italy
Volkswagen AG	Germany

- \* SAM Sector Leader
- \*\* SAM Sector Mover

# **SECTOR STATISTICS**

Number of companies in universe	28
Number of companies assessed by SAM in 2011	17
Assessed companies to total companies in universe (%)	61
Market capitalization of assessed companies to total market capitalization	<b>89</b> (%)

# **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	73%	94%	26%
Environmental	75%	99%	35%
Social	68%	92%	39%

<sup>\*</sup> Average score of all assessed companies in the sector



# Banks

# **DRIVING FORCES**

The banking sector remains under public scrutiny. Markets have lost faith in the sustainability of sovereign debt levels and the adequacy of capital at, in particular, European banks that have large exposures to troubled economies. The pressure to de-risk and adopt new business models that are more concerned with long-term value creation is higher than ever. As banks work to restore their credibility and contribute to stable financial systems, leadership and accountability are key factors in building a competitive advantage. Adherence to international best practices in corporate governance, risk management and compliance standards remains a necessity. Globalization, demographic shifts and climate change will continue to impact the business environment. Leading banks are integrating environmental and social aspects into their long-term strategies and performance reviews. A multi-stakeholder-driven approach to developing innovative and prudent financial services and products is essential. Motivated, highly educated and experienced employees are a key factor in developing these financial services and products as well as in attracting and retaining clients. All the while, climate change and resource scarcity are creating new business opportunities, for example in the area of low-carbon mortgages or funding schemes for innovative sectors that are paving the way toward a low-carbon economy.

#### **HIGHLIGHTED CRITERIA**

# ECONOMIC DIMENSION

- Corporate Governance
- Customer Relationship Management
- Risk & Crisis Management
- Stakeholder Engagement

# **ENVIRONMENTAL DIMENSION**

- Business Risks Large Projects/Export Finance
- Climate Change Governance
- Environmental Reporting
- Business Opportunities
   Financial Services/Products

#### SOCIAL DIMENSION

- Financial Inclusion/Capacity Building
- Human Capital Development
- Labor Practice Indicators
- Talent Attraction & Retention

# **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

SAM Gold Class

SAM Bronze Class

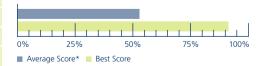
	Company	Country
	Westpac Banking Corp. *	Australia
	Australia & New Zealand Banking Group Ltd.	Australia
S	Banco Bradesco S/A	Brazil
	Barclays plc U	Jnited Kingdom
	Itau Unibanco Holding S.A.	Brazil
	National Australia Bank Ltd.	Australia
	Banca Monte dei Paschi di Sier	na S.p.A. Italy
	Banco Bilbao Vizcaya Argenta	ria S.A. Spain
	Banco do Brasil S/A	Brazil
	Banco Espirito Santo S/A	Portugal
	Banco Santander S.A.	Spain
	Bancolombia S.A.	Colombia
	Bank of Nova Scotia	Canada
	BNP Paribas S.A.	France
	Canadian Imperial Bank of Commerce	Canada
	Citigroup Inc.	United States

Company	Country
Commonwealth Bank of Australia	Australia
Credit Agricole S.A.	France
Credit Suisse Group	Switzerland
Danske Bank A/S **	Denmark
Deutsche Bank AG	Germany
DnB NOR ASA	Norway
HSBC Holdings plc	United Kingdom
Intesa Sanpaolo S.p.A.	Italy
Lloyds Banking Group PLC	United Kingdom
Nedbank Group Ltd.	South Africa
Royal Bank of Canada	Canada
Royal Bank of Scotland Group plc	United Kingdom
Societe Generale S.A.	France
Standard Chartered plc	United Kingdom
UBS AG	Switzerland
UniCredit S.p.A.	Italy

# **SECTOR STATISTICS**

Number of companies in universe	199
Number of companies assessed by SAM in 2011	105
Assessed companies to total companies in universe (%)	53
Market capitalization of assessed companies to total market capitalization (%)	87

# RESULTS AT SECTOR LEVEL



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	66%	97%	38%
Environmental	42%	88%	24%
Social	48%	91%	38%

<sup>\*</sup> Average score of all assessed companies in the sector

<sup>\*</sup> SAM Sector Leader

<sup>\*\*</sup> SAM Sector Mover



# **Beverages**

# **DRIVING FORCES**

In the extremely competitive beverage industry, only innovative companies can hope to gain market share. Carbonated soft drinks still account for the majority of non-alcoholic beverages but have been in decline for years as the market moves toward healthier and lower-calorie alternatives. Industry participants are developing and marketing higher-quality and more diversified products to meet new consumption patterns. Over the last few years, such niche categories as energy drinks have emerged and expanded. Innovative beverage companies can capture these new market trends that frequently offer faster growth and higher margins. Fresh opportunities can also be tapped in emerging markets where favorable demographic trends are boosting consumption. Given the large proportion of calories consumed through beverages, the industry's ingredients and advertising policies have increasingly come under scrutiny. Producers of alcoholic beverages, in particular, face the challenge of implementing effective and responsible marketing strategies.

#### **HIGHLIGHTED CRITERIA**

# ECONOMIC DIMENSION

- Brand Management
- Health & Nutrition
- Strategy for Emerging Markets
- Risk & Crisis Management

# ENVIRONMENTAL DIMENSION

- Environmental Policy/ Management System
- Packaging
- Raw Material Sourcing
- Water Related Risks

#### SOCIAL DIMENSION

- Human Capital Development
- Responsibility for Alcoholic Products
- Talent Attraction & Retention
- Standards for Suppliers

# **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

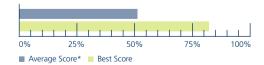
	Company	Country
SAM Gold Class	PepsiCo Inc. *	United States
SAM Silver Class	Coca-Cola Hellenic Bottling Co. S.A.	Greece
	Diageo plc	United Kingdom
SAM Bronze Class	Molson Coors Brewing Co. **	United States
	Heineken N.V.	Netherlands

- \* SAM Sector Leader
- \*\* SAM Sector Mover

# **SECTOR STATISTICS**

Number of companies in universe	30
Number of companies assessed by SAM in 2011	24
Assessed companies to total companies in universe (%)	80
Market capitalization of assessed companies to total market capitalization (%)	97

# **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	53%	86%	41%
Environmental	48%	90%	24%
Social	49%	75%	35%

<sup>\*</sup> Average score of all assessed companies in the sector



# Biotechnology

# **DRIVING FORCES**

Biotechnology companies use technologies based on biological systems to develop medical, agricultural and industrial products and processes. The sector is characterized by extensive R&D efforts and a high risk of failure in product development. Innovation and intellectual property are key drivers that make highly qualified employees and effective human capital management important success factors. Medical (red) biotechnology companies face concerns about pricing and reimbursement of their products as well as global patent protection and drug safety issues. The use of biotech products in agriculture (green biotechnology) is widely criticized among certain stakeholder groups. Public mistrust centers on the production, release and use of genetically modified seeds and plants. The use of genetically modified organisms in closed production processes (white biotechnology) to increase the cost efficiency, speed and yield of industrial applications is far less criticized. Building and maintaining stakeholders' trust in their core technologies is a general sustainability challenge faced by the biotechnology industry.

#### **HIGHLIGHTED CRITERIA**

# ECONOMIC DIMENSION

- Corporate Governance
- Marketing Practices
- Research & Development
- Risk & Crisis Management

### **ENVIRONMENTAL DIMENSION**

- Environmental Reporting
- Environmental Policy/ Management System
- Climate Strategy

#### SOCIAL DIMENSION

- Human Capital Development
- Labor Practice Indicators
- Talent Attraction & Retention
- Health Outcome
   Contribution

# **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

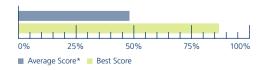
	Company	Country
SAM Gold Class	Novozymes A/S *	Denmark
SAM Silver Class	Life Technologies Corp.	United States
SAM Bronze Class	Biogen Idec Inc.	United States
	Amgen Inc. **	United States
	* CAM Sector Leader	

<sup>\*</sup> SAM Sector Leader \*\* SAM Sector Mover

# SECTOR STATISTICS

Number of companies in universe	26
Number of companies assessed by SAM in 2011	14
Assessed companies to total companies in universe (%)	54
Market capitalization of assessed companies to total market capitalization (%)	81

# **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	57%	86%	40%
Environmental	36%	98%	10%
Social	40%	87%	50%

<sup>\*</sup> Average score of all assessed companies in the sector



# **Building Materials & Fixtures**

# **DRIVING FORCES**

Rapid urbanization in emerging markets as well as rising awareness of environmental issues and new building methods have made the building materials sector a highly dynamic industry. The sector covers a diverse set of producers engaged in the production of materials used in the construction and refurbishment of buildings and structures, including bathroom and kitchen fixtures, plumbing supplies and central air-conditioning and heating equipment. The industry's diverse nature results in varying competitive environments. Cement manufacturing consumes large amounts of energy and is a prime source of greenhouse gas emissions. As a result, reductions in greenhouse gas emissions, environmental life cycle analyses and examinations of reuse/recycling options will be top priorities in the sector. Increasingly sophisticated building materials meet tighter energy- and water-efficiency regulations while integrating innovative technologies such as solar cells. As a result, the industry will become even more knowledge-driven than in the past, making talent attraction, retention and development key sources of competitive advantage.

#### HIGHLIGHTED CRITERIA

# ECONOMIC DIMENSION

- Antitrust Policy
- Corporate Governance
- Customer Relationship Management
- Risk & Crisis Management

# **ENVIRONMENTAL DIMENSION**

- Biodiversity
- Climate Strategy
- Environmental Reporting
- Transport & Logistics

#### SOCIAL DIMENSION

- Human Capital
   Development
- Occupational Health & Safety
- Standards for Suppliers
- Talent Attraction & Retention

# **SUSTAINABILITY LEADERS 2012**

As of December 31, 201

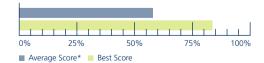
	Company	Country
SAM Gold Class	Siam Cement Pcl *	Thailand
SAM Silver Class	CRH plc	Ireland
	Holcim Ltd.	Switzerland
	Owens Corning	United States
SAM Bronze Class	Asahi Glass Co. Ltd. **	Japan
	Italcementi S.p.A.	Italy
	Lafarge S.A.	France
	Toto Ltd.	Japan
	Weyerhaeuser Co.	United States

- \* SAM Sector Leader
- \*\* SAM Sector Mover

# **SECTOR STATISTICS**

Number of companies in universe	49
Number of companies assessed by SAM in 2011	25
Assessed companies to total companies in universe (%)	51
Market capitalization of assessed companies to total market capitalization (%)	72

# **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	67%	87%	28%
Environmental	50%	91%	33%
Social	58%	81%	39%

<sup>\*</sup> Average score of all assessed companies in the sector



# Chemicals

# **DRIVING FORCES**

The chemical sector comprises companies that develop, manufacture and distribute specialty and commodity chemicals, plastics, industrial gases, agrochemicals and additives for the healthcare and wellness industries. Innovative process and product developments remain key sectoral drivers. Nevertheless, growing awareness of the environmental impact of chemical operations has resulted in legislative and consumer-driven pressure on the industry to adopt more sustainable approaches, such as implementing strict emission controls or corporate social responsibility initiatives. Also, new product development requires more sustainable process designs involving (bio) catalyzed reactions and the replacement of traditional solvents and hazardous reagents with renewable materials. Finally, new product applications require the implementation of comprehensive product stewardship management systems that include product databases and client training.

#### **HIGHLIGHTED CRITERIA**

# ECONOMIC DIMENSION

- Corporate Governance
- Customer Relationship Management
- Innovation Management
- Risk & Crisis Management

# ENVIRONMENTAL DIMENSION

- Climate Strategy
- Environmental Reporting
- Environmental Policy/ Management System
- Product Stewardship

# SOCIAL DIMENSION

- Human Capital Development
- Occupational Health & Safety
- Standards for Suppliers
- Talent Attraction & Retention

# **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

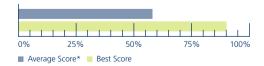
	Company	Country
SAM Gold Class	DSM N.V. *	Netherlands
	Akzo Nobel N.V.	Netherlands
	Bayer AG	Germany
SAM Silver Class	BASF SE	Germany
	Dow Chemical Co.	United States
	Praxair Inc.	United States
SAM Bronze Class	Syngenta AG	Switzerland
	Teijin Ltd.	Japan
	Air Products & Chemicals Inc.	United States
	E.I. du Pont de Nemours & Co.	United States
	Honam Petrochemical Corp.	South Korea
	Lanxess AG **	Germany
	LG Chem Ltd.	South Korea
	Linde AG	Germany
	Potash Corp. of Saskatchewan Inc.	Canada
	Rhodia S.A.	France
	Umicore S.A.	Belgium

<sup>\*</sup> SAM Sector Leader

# **SECTOR STATISTICS**

Number of companies in universe	107
Number of companies assessed by SAM in 2011	57
Assessed companies to total companies in universe (%)	53
Market capitalization of assessed companies to total market capitalization (%)	81

# RESULTS AT SECTOR LEVEL



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	61%	93%	28%
Environmental	58%	93%	35%
Social	54%	88%	37%

<sup>\*</sup> Average score of all assessed companies in the sector

<sup>\*\*</sup> SAM Sector Mover



# Clothing, Accessories & Footwear

# **DRIVING FORCES**

The textile, footwear and accessories industry is characterized by limited growth in the major developed markets and product categories. Constant product innovation and expansion into new markets help to alleviate this problem, but may require additional resources. Shorter product cycles not only require innovative marketing strategies, but also sound sourcing models. Additionally, the industry faces the challenge of integrating environmental aspects into product design and development. At the same time, companies must engage contractors and suppliers in sustainability issues, actively monitor labor practices and disclose the results of these activities to ensure fair working conditions as well as protect their reputation and thus their brand and enterprise value.

# **HIGHLIGHTED CRITERIA**

# ECONOMIC DIMENSION

- Brand Management
- Codes of Conduct/ Compliance/ Corruption & Bribery
- Corporate Governance
- Risk & Crisis Management

# **ENVIRONMENTAL DIMENSION**

- Environmental Policy/ Management System
- Environmental Reporting
- CO, from Logistics
- Product Stewardship

#### SOCIAL DIMENSION

- Talent Attraction & Retention
- Human Capital Development
- Stakeholder Engagement
- Standards for Suppliers

# **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

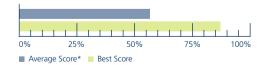
	Company	Country
SAM Gold Class	adidas AG *	Germany
SAM Silver Class	Nike Inc.	United States
	Puma AG	Germany
SAM Bronze Class	Christian Dior S.A.	France
	LVMH Moet Hennessy Louis Vuitton	France
	Woongjin Chemical Co. Ltd. **	South Korea

<sup>\*</sup> SAM Sector Leader

# **SECTOR STATISTICS**

Number of companies in universe	31
Number of companies assessed by SAM in 2011	16
Assessed companies to total companies in universe (%)	52
Market capitalization of assessed companies to total market capitalization (%)	75

# **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	65%	86%	29%
Environmental	52%	95%	22%
Social	55%	89%	49%

<sup>\*</sup> Average score of all assessed companies in the sector

<sup>\*\*</sup> SAM Sector Mover



# Communication Technology

# **DRIVING FORCES**

Growing demand for integrated voice services and data applications has led to shorter product life cycles and heightened competition for manufacturers and providers of communication equipment. As a result, innovation and intellectual property are key issues for this industry. Significant additional investments in telecommunication infrastructure will be required to meet the growing demand for cellular network capacity. Growing awareness of the environmental impact of infrastructure and equipment over the entire life cycle has raised demand for product designs that consider the use of chemicals in production, energy efficiency, and waste issues. Moreover, takeback programs, greater modularity, and extended producer responsibility are becoming more and more relevant. Environmental and social standards for suppliers are crucial issues as a large share of production is outsourced to emerging economies. Additionally, there are increasing demands for reduced exposures to electromagnetic fields, although their long-term health impact remains difficult to assess.

#### **HIGHLIGHTED CRITERIA**

# ECONOMIC DIMENSION

- Codes of Conduct/ Compliance/ Corruption & Bribery
- Corporate Governance
- Customer Relationship Management
- Risk & Crisis Management

#### ENVIRONMENTAL DIMENSION

- Climate Strategy
- Hazardous Substances
- Environmental Policy/ Management System
- Product Stewardship

# SOCIAL DIMENSION

- Human Capital Development
- Labor Practice Indicators
- Standards for Suppliers
- Talent Attraction & Retention

# **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

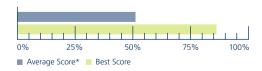
	Company	Country
SAM Gold Class	Alcatel-Lucent */**	France
SAM Silver Class	Nokia Corp.	Finland
SAM Bronze Class	Motorola Mobility Holdings Inc.	United States
	Motorola Solutions Inc.	United States

# \* SAM Sector Leader

# **SECTOR STATISTICS**

Number of companies in universe	26
Number of companies assessed by SAM in 2011	14
Assessed companies to total companies in universe (%)	54
Market capitalization of assessed companies to total market capitalization (%)	89

# **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	60%	89%	36%
Environmental	41%	90%	31%
Social	49%	80%	33%

<sup>\*</sup> Average score of all assessed companies in the sector

<sup>\*\*</sup> SAM Sector Mover



# Computer Hardware & Electronic Office Equipment

# **DRIVING FORCES**

The technology equipment sector is characterized by constant innovation, increasing vertical integration and mass production of electronic equipment. Shorter product life cycles and increasing demand from emerging economies have resulted in high disposal volumes. To address the issue of electronic waste, product design and sales need to take into account energy and material conservation, modularity, take-back programs and extended producer responsibility. Revenue streams can be diversified through a gradual migration from sale to leasing, and from products to services provision. For example, outsourcing of data storage to huge datacenters offers new business opportunities that enable energy-efficient and cost-effective storage for customers. Effective implementation of environmental standards and monitoring of supplier compliance in such areas as the use of hazardous materials and fair working conditions in emerging economies are particularly relevant for the sector. Furthermore, information technology may increasingly enable carbon emissions reductions.

#### **HIGHLIGHTED CRITERIA**

# ECONOMIC DIMENSION

- Corporate Governance
- Customer Relationship Management
- Risk & Crisis Management
- Supply Chain Management

# ENVIRONMENTAL DIMENSION

- Climate Strategy
- Hazardous Substances
- Environmental Policy/ Management System
- Product Stewardship

#### SOCIAL DIMENSION

- Human Capital Development
- Labor Practice Indicators
- Standards for Suppliers
- Talent Attraction & Retention

# **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

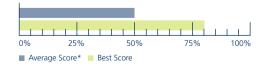
	Company	Country
SAM Gold Class	Au Optronics Corp. *	Taiwan
SAM Bronze Class	FUJIFILM Holdings Corp.	Japan
	NEC Corp.	Japan
	Xerox Corp.	United States
	Dell Inc.	United States
	EMC Corp. **	United States
	Lexmark International Inc.	United States

- \* SAM Sector Leader
- \*\* SAM Sector Mover

# **SECTOR STATISTICS**

Number of companies in universe	34
Number of companies assessed by SAM in 2011	23
Assessed companies to total companies in universe (%)	68
Market capitalization of assessed companies to total market capitalization (%)	94

# **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	56%	78%	36%
Environmental	48%	87%	30%
Social	47%	75%	34%

<sup>\*</sup> Average score of all assessed companies in the sector



# Computer Services & Internet

# **DRIVING FORCES**

The IT service sector helps companies run their businesses efficiently through software applications and integration. A secure use of information technology and a rigorously enforced code of conduct covering access to confidential data provide client privacy protection. Companies need effective knowledge management and training to attract and retain qualified staff. Leading companies can access and share the knowledge base of a global network to create customized solutions. Companies can restore shareholder confidence in their corporate governance only by becoming more transparent, particularly with regard to disclosures of business practices. The sector's main environmental impacts stem from its office operations, which can be addressed through recycling and eco-efficiency programs. In addition, IT service providers can help reduce their customers' environmental impact through information technology applications.

# HIGHLIGHTED CRITERIA

# ECONOMIC DIMENSION

- Corporate Governance
- Customer Relationship Management
- Privacy Protection
- Risk & Crisis Management

# ENVIRONMENTAL DIMENSION

- Climate Strategy
- Environmental Policy/ Management System
- Environmental Reporting

#### SOCIAL DIMENSION

- Human Capital Development
- Labor Practice Indicators
- Standards for Suppliers
- Talent Attraction & Retention

# **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

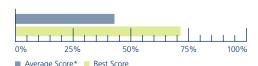
Company	Country
Teradata Corp. *	United States
Indra Sistemas S.A.	Spain
IBM (International Business Machines Corp.)	United States
SK C&C Co. Ltd. **	South Korea
Wipro Ltd.	India
Tata Consultancy Services Ltd.	India
	Teradata Corp. * Indra Sistemas S.A. IBM (International Business Machines Corp.) SK C&C Co. Ltd. ** Wipro Ltd.

<sup>\*</sup> SAM Sector Leader

# **SECTOR STATISTICS**

Number of companies in universe	38
Number of companies assessed by SAM in 2011	23
Assessed companies to total companies in universe (%)	61
Market capitalization of assessed companies to total market capitalization (%)	91

# **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	49%	81%	47%
Environmental	38%	83%	20%
Social	38%	65%	33%

 $<sup>\</sup>ensuremath{^{\star}}$  Average score of all assessed companies in the sector

<sup>\*\*</sup> SAM Sector Mover



# Containers & Packaging

# **DRIVING FORCES**

Amid the continuing global downturn, this sector is faced with several challenging issues including stagnating or declining demand in developed markets; higher material, energy and capital costs, and shifts in client and consumer demand. The markets in which these companies operate remain highly competitive, with substantial downward pressure on both prices and operating margins. Some players seek to set themselves apart through innovative products and solutions while moving into emerging markets that seem to offer superior growth potential.

At the same time, stakeholders are placing increasing importance on environmental and social performance, as reflected in converging public communication strategies. Leading companies integrate these aspects into their growth strategies, continually improve and effectively communicate them to their stakeholders. Overall, the sector remains characterized by a trend toward greater energy and resource efficiency, innovative solutions and the strengthening of companies' reputation through greater transparency and involvement.

#### **HIGHLIGHTED CRITERIA**

# ECONOMIC DIMENSION

- Corporate Governance
- Customer Relationship Management
- Risk & Crisis Management
- Codes of Conduct/ Compliance/ Corruption & Bribery

# **ENVIRONMENTAL DIMENSION**

- Product Stewardship
- Environmental Reporting
- Environmental Policy/ Management System
- Climate Strategy

# SOCIAL DIMENSION

- Talent Attraction &
- Human Capital Development
- Stakeholder Engagement
- Standards for Suppliers

# **SUSTAINABILITY LEADERS 2012**

As of December 31, 201

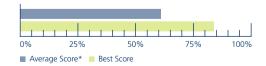
	Company	Country
SAM Gold Class	Sonoco Products Co. */**	United States
	MeadWestvaco Corp.	United States
SAM Bronze Class	Ball Corp.	United States

<sup>\*</sup> SAM Sector Leader \*\* SAM Sector Mover

# SECTOR STATISTICS

Number of companies in universe	17
Number of companies assessed by SAM in 2011	10
Assessed companies to total companies in universe (%)	59
Market capitalization of assessed companies to total market capitalization (%)	73

# RESULTS AT SECTOR LEVEL



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	73%	90%	29%
Environmental	54%	86%	29%
Social	58%	83%	42%

<sup>\*</sup> Average score of all assessed companies in the sector



# Diversified Industrials

## **DRIVING FORCES**

Sound operational management under environmental considerations is a key issue for the diversified industrials sector, but the industry's main challenges and opportunities are product-related. Important issues include efficiency, safety, hazardous content and product disposal or recycling. Innovation and the integration of environmental considerations into product development are key criteria. In equipment markets, preparing for customers' future carbon constraints is an important factor in product development. For consumer-facing businesses, the Eco-Design Framework is a key directive to follow. Typically, diversified industrials have a global presence that also includes emerging economies. To manage their workforce's diverse cultural background, companies must focus on common values, including policies and compliance systems to prevent corruption and illegal market practices. High health & safety standards must be met on all operational levels. Lengthening supply chains in emerging markets increase companies' potential exposure to human rights abuses. Finally, stakeholder engagement is a key long-term success factor.

#### HIGHLIGHTED CRITERIA

## ECONOMIC DIMENSION

- Corporate Governance
- Customer Relationship Management
- Risk & Crisis Management

## **ENVIRONMENTAL DIMENSION**

- Environmental Policy/ Management System
- Water Related Risks
- Climate Strategy
- Product Stewardship

## SOCIAL DIMENSION

- Human Capital Development
- Labor Practice Indicators
- Occupational Health & Safety
- Standards for Suppliers

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

	Company	Country
SAM Gold Class	Siemens AG *	Germany
SAM Bronze Class	3M Company **	United States
	Toshiba Corp.	Japan
	Eaton Corp.	United States
	General Electric Co.	United States

<sup>\*</sup> SAM Sector Leader \*\* SAM Sector Mover

# SECTOR STATISTICS

Number of companies in universe	35
Number of companies assessed by SAM in 2011	20
Assessed companies to total companies in universe (%)	57
Market capitalization of assessed companies to total market capitalization (%)	91

## RESULTS AT SECTOR LEVEL



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	53%	94%	28%
Environmental	38%	90%	35%
Social	46%	86%	37%

<sup>\*</sup> Average score of all assessed companies in the sector



# **Durable Household Products**

## **DRIVING FORCES**

Innovation, quality and branding are the key differentiating factors in this sector. In addition, leading companies actively manage safety and environmental issues throughout the product life cycle. Take-back guarantees for used products and customer-oriented services offer interesting opportunities from a business and environmental perspective. Moreover, consumers increasingly demand products tailored to their specific needs, including a high level of comfort and adaptability, as well as transparent product information and labeling. Brands that successfully consider the shift toward sustainable consumption and offer attractive solutions may emerge as leaders in terms of business model innovation. Additional long-term challenges arise from integrating suppliers into the production chain.

#### **HIGHLIGHTED CRITERIA**

## **ECONOMIC DIMENSION**

- Brand Management
- Customer Relationship Management
- Innovation Management
- Risk & Crisis Management

## **ENVIRONMENTAL DIMENSION**

- Product Stewardship
- Environmental Policy/ Management System
- Environmental Reporting

## SOCIAL DIMENSION

- Human Capital Development
- Stakeholder Engagement
- Standards for Suppliers
- Talent Attraction & Retention

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

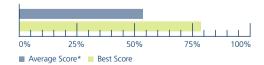
	Company	Country
SAM Gold Class	Electrolux AB */**	Sweden
SAM Bronze Class	Woongjin Coway Co., Ltd.	South Korea

- \* SAM Sector Leader
- \*\* SAM Sector Mover

## **SECTOR STATISTICS**

Number of companies in universe	13
Number of companies assessed by SAM in 2011	8
Assessed companies to total companies in universe (%)	62
Market capitalization of assessed companies to total market capitalization (%)	74

## **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	59%	81%	41%
Environmental	48%	83%	21%
Social	53%	76%	38%

<sup>\*</sup> Average score of all assessed companies in the sector



# Electric Components & Equipment

## **DRIVING FORCES**

As high-tech providers, companies in this sector rely heavily on the knowledge, qualification and training of their employees for their business success. Companies whose technologies and products are used in the defense sector should brace for increased reputational risks. In the medium term, companies serving the communications and information technology sectors are expected to benefit from balanced growth in these markets, after they absorb the significant amount of overcapacity built up over the past years. Providers of advanced industrial equipment also play a key role in the development and provision of new products and technologies focusing on energy efficiency and various aspects of environmental protection such as testing, measurement and removal of pollutants.

## **HIGHLIGHTED CRITERIA**

#### **ECONOMIC DIMENSION**

- Corporate Governance
- Customer Relationship Management
- Risk & Crisis Management
- Innovation Management

#### **ENVIRONMENTAL DIMENSION**

- Climate Strategy
- Product Stewardship
- Water Related Risks
- Environmental Policy/ Management System

#### SOCIAL DIMENSION

- Human Capital Development
- Labor Practice Indicators
- Occupational Health & Safety
- Standards for Suppliers

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

	Company	Country
SAM Gold Class	Lite-On Technology Corp. */**	Taiwan
SAM Bronze Class	Samsung Electro-Mechanics Co. Ltd.	South Korea
	Fuji Electric Co. Ltd.	Japan
	Ibiden Co., Ltd.	Japan
	LeGrand S.A.	France
	LG Innotek Co. Ltd.	South Korea
	Schneider Electric S.A.	France
	TDK Corp.	Japan

<sup>\*</sup> SAM Sector Leader \*\* SAM Sector Mover

# SECTOR STATISTICS

Number of companies in universe	46
Number of companies assessed by SAM in 2011	21
Assessed companies to total companies in universe (%)	46
Market capitalization of assessed companies to total market capitalization (%)	74

## **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	48%	85%	29%
Environmental	39%	88%	37%
Social	46%	86%	34%

 $<sup>\</sup>ensuremath{^{\star}}$  Average score of all assessed companies in the sector



# Electricity

## **DRIVING FORCES**

The Fukushima disaster drew attention to energy strategies around the world, placing electric utilities under increased scrutiny over their operational performance. In the aftermath of the disaster, consumers' awareness of environmental issues and their desire for greener products is bound to increase, while regulations and controls are tightened. This makes it ever more important for companies to integrate sustainability aspects into their operations. Nonetheless, electric utilities face key challenges: In emerging economies, industrialization and urbanization imply a huge need for additional generation capacity. In developed economies, enormous efforts are required to develop and replace an aging grid while integrating a growing share of renewable energy into the power mix. Moreover, infrastructure developments must factor in stakeholders' concerns as these can hinder the progress of a project. The austerity measures brought about by the financial crisis will also make it more important for companies to offer their clients efficiency enhancements and opportunities to cut their energy consumption while generating additional revenues.

#### HIGHLIGHTED CRITERIA

## **ECONOMIC DIMENSION**

- Corporate Governance
- Customer Relationship Management
- Market Opportunities
- Risk & Crisis Management

## **ENVIRONMENTAL DIMENSION**

- Climate Strategy
- Electricity Generation
- Environmental Reporting
- Transmission & Distribution

#### SOCIAL DIMENSION

- Human Capital Development
- Occupational Health & Safety
- Stakeholder Engagement
- Talent Attraction & Retention

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

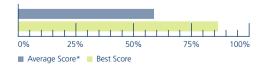
	Company	Country
SAM Gold Class	EDP - Energias de Portugal S.A. *	Portugal
	Iberdrola S.A. **	Spain
	TERNA S.p.A.	Italy
SAM Bronze Class	AGL Energy Ltd.	Australia
	Companhia Energetica de Minas Gerais - CEMIG	Brazil
	Duke Energy Corp.	United States
	E.ON AG	Germany
	Endesa S.A.	Spain
	Enel S.p.A.	Italy
	Public Service Enterprise Group Inc.	United States
	RWE AG	Germany
	Fortum Oyj	Finland
	GDF Suez S.A.	France
	Red Electrica Corp. S.A.	Spain
	TransAlta Corp.	Canada
	Verbund AG	Austria

<sup>\*</sup> SAM Sector Leader

## **SECTOR STATISTICS**

Number of companies in universe	104
Number of companies assessed by SAM in 2011	59
Assessed companies to total companies in universe (%)	57
Market capitalization of assessed companies to total market capitalization (%)	83

# RESULTS AT SECTOR LEVEL



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	62%	90%	35%
Environmental	51%	93%	35%
Social	61%	88%	30%

<sup>\*</sup> Average score of all assessed companies in the sector

<sup>\*\*</sup> SAM Sector Move



# Electronic Equipment

## **DRIVING FORCES**

Beyond the broad focus on efficiency for customers inherent in all engineering and capital goods markets, a number of products from the electronic equipment sector have specific sustainability applications. Providers of control and automation solutions, for example, can tap opportunities resulting from customers' drive for energy and carbon efficiency. In addition, increasing safety concerns present opportunities in the area of controls and sensors. Regulatory requirements governing the protection of air, soil and water systems in developed markets as well as in fast-growing new economies are driving the markets for testing equipment, measurement and control technology, and pollutant removal equipment. Increasing regulatory requirements governing the energy efficiency of buildings have created new opportunities for manufacturers of specialized products and services. As high-tech providers, companies in this sector rely heavily on the knowledge, qualification and training of their employees for their business success. Given the long-term nature of B2B relationships, tools to monitor the quality of client management are important.

#### **HIGHLIGHTED CRITERIA**

## ECONOMIC DIMENSION

- Codes of Conduct/ Compliance/ Corruption & Bribery
- Corporate Governance
- Customer Relationship Management
- Risk & Crisis Management

#### **ENVIRONMENTAL DIMENSION**

- Climate Strategy
- Environmental Reporting
- Environmental Policy/ Management System
- Product Stewardship

#### SOCIAL DIMENSION

- Human Capital Development
- Occupational Health & Safety
- Standards for Suppliers
- Talent Attraction & Retention

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

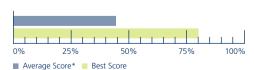
	Company	Country
SAM Gold Class	Samsung SDI Co. Ltd. *	South Korea
	Delta Electronics Inc. **	Taiwan
SAM Silver Class	Hitachi Ltd.	Japan
		11.5.16.3
	Agilent Technologies Inc.	United States

## \* SAM Sector Leader

# SECTOR STATISTICS

Number of companies in universe	29
Number of companies assessed by SAM in 2011	15
Assessed companies to total companies in universe (%)	52
Market capitalization of assessed companies to total market capitalization (%)	80

## **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	51%	81%	30%
Environmental	38%	85%	33%
Social	45%	80%	37%

<sup>\*</sup> Average score of all assessed companies in the sector

<sup>\*\*</sup> SAM Sector Mover



# **Financial Services**

## **DRIVING FORCES**

The financial services sector consists of a heterogeneous group of companies such as stock exchanges, asset managers and investment holdings. These companies have been indirectly affected by the increased concerns about the health of the banking sector through falling asset prices, shrinking volumes, high volatility, fading risk appetite and regulatory pressure. Accountability and leadership are crucial for building a competitive advantage. Adherence to international bestpractice standards in corporate governance, risk management and compliance is a necessity. Globalization, regulation, demographic shifts and climate change will continue to influence the business environment. Leading companies are integrating environmental and social factors into their long-term strategies and performance reviews. A multi-stakeholder-driven approach to developing innovative and prudent financial services and products is essential. Motivated, highly educated and experienced employees are crucial to developing these financial services and products as well as in attracting and retaining clients. Examples include venture capital investments focusing on new technologies that promote the transition to a low-carbon economy or improve resource efficiency, as well as the integration of environmental and social considerations into companies' service portfolios.

#### HIGHLIGHTED CRITERIA

## **ECONOMIC DIMENSION**

- Corporate Governance
- Customer Relationship Management
- Risk & Crisis Management
- Stakeholder Engagement

## **ENVIRONMENTAL DIMENSION**

- Business Opportunities
   Financial Services/Products
- Business Risks Large Projects/Export Finance
- Climate Change Governance
- Environmental Reporting

#### SOCIAL DIMENSION

- Financial Inclusion/Capacity Building
- Human Capital Development
- Labor Practice Indicators
- Talent Attraction & Retention

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

SAM Gold Class
SAM Bronze Class

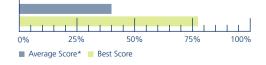
Company	Country
Itausa-Investimentos Itau S/A *	Brazil
Samsung Securities Co. Ltd.	South Korea
3i Group plc	United Kingdom
• • •	J
AMP Ltd.	Australia
Criteria CaixaCorp S.A. <sup>1</sup>	Spain
Daiwa Securities Group Inc.	Japan
Deutsche Boerse AG	Germany
Grupo de Inversiones Suramericana S.A.	Colombia
Investec Ltd.	South Africa
Man Group plc	United Kingdom
Morgan Stanley **	United States
Nomura Holdings Inc.	Japan
Northern Trust Corp.	United States
NYSE Euronext	United States
Provident Financial plc	United Kingdom
Redecard S/A	Brazil
Schroders plc	United Kingdom
State Street Corp.	United States

## \* SAM Sector Leader

## **SECTOR STATISTICS**

Number of companies in universe	123
Number of companies assessed by SAM in 2011	61
Assessed companies to total companies in universe (%)	50
Market capitalization of assessed companies to total market capitalization (%)	79

# RESULTS AT SECTOR LEVEL



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	57%	89%	38%
Environmental	24%	66%	24%
Social	33%	79%	38%

<sup>\*</sup> Average score of all assessed companies in the sector

<sup>\*\*</sup> SAM Sector Mover

<sup>&</sup>lt;sup>1</sup> In 2011, Criteria CaixaCorp has been restructured and renamed to CaixaBank



# Fixed Line Communications

## **DRIVING FORCES**

The fixed-line telecommunications industry operates in a highly competitive environment characterized by a continuously blurred boundary between fixed-line and wireless technology. This industry has the inherent potential to significantly improve work habits and lifestyles, resulting in a reduction of travel and transportation, as well as their corresponding environmental impacts. In order to remain competitive in a market subject to rapid technological change, companies will need to adopt flexible business models that enable them to integrate new-generation technologies and services, such as voice-over-IP, TV and Internet services, into their offering. Energy efficiency and state-of-theart infrastructure remain the sector's key environmental challenges. Successful companies analyze the social impact of telecommunication services and act on the results of their analyses. Providers of low-cost telecommunication solutions that help reduce the digital divide and pursue an emerging markets strategy are optimally positioned for sustainable sales growth.

#### **HIGHLIGHTED CRITERIA**

## **ECONOMIC DIMENSION**

- Corporate Governance
- Customer Relationship Management
- Privacy Protection
- Risk & Crisis Management

## **ENVIRONMENTAL DIMENSION**

- Climate Strategy
- Environmental Policy/ Management System
- Environmental Reporting

#### SOCIAL DIMENSION

- Human Capital Development
- Labor Practice Indicators
- Stakeholder Engagement
- Talent Attraction & Retention

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

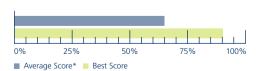
	Company	Country
SAM Gold Class	KT Corp. */**	South Korea
	BT Group plc	United Kingdom
	Telecom Italia S.p.A.	Italy
	Telefonica S.A.	Spain
SAM Silver Class	KPN N.V.	Netherlands
	Portugal Telecom SGPS S/A	Portugal

<sup>\*</sup> SAM Sector Leader \*\* SAM Sector Mover

## **SECTOR STATISTICS**

Number of companies in universe	37
Number of companies assessed by SAM in 2011	25
Assessed companies to total companies in universe (%)	68
Market capitalization of assessed companies to total market capitalization (%)	92

## **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	69%	93%	44%
Environmental	57%	94%	16%
Social	63%	90%	40%

<sup>\*</sup> Average score of all assessed companies in the sector



# Food & Drug Retailers

## **DRIVING FORCES**

Food & drug retail has always been characterized by intense competition and battles for market share. This has resulted in industry consolidation over the past few years with interest in M&A remaining high. The shift toward eating at home should continue to favor those food retailers that have capitalized on this trend with expanded offerings of private label or store brands that carry higher margins than branded products. The health and wellness trend is also clearly evident as traditional food and drug retailers increase their exposure to natural and organic products and healthier formulations. International sourcing has increased and food retailers need to make their supply chains more transparent. Drug retailers are likely to play a greater role in managing rising healthcare costs. Several key drug patents are set to expire and a wave of generic drugs is expected to hit the market over the next few years, resulting in significant cost savings. Consumers can also benefit from drug retailers' convenient locations and in-store clinics, which offer affordable access to basic care.

#### **HIGHLIGHTED CRITERIA**

## **ECONOMIC DIMENSION**

- Corporate Governance
- Risk & Crisis Management
- Health & Nutrition
- Codes of Conduct/ Compliance/ Corruption & Bribery

#### **ENVIRONMENTAL DIMENSION**

- Environmental Policy/ Management System
- Raw Material Sourcing
- Packaging
- Genetically Modified Organisms

#### SOCIAL DIMENSION

- Human Capital Development
- Labor Practice Indicators
- Talent Attraction & Retention
- Standards for Suppliers

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

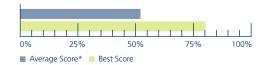
	Company	Country
SAM Gold Class	J Sainsbury plc */**	United Kingdom
SAM Bronze Class	Woolworths Ltd.	Australia
	Ahold N.V.	Netherlands
	Kesko Oyj	Finland
	Metro AG	Germany
	Tesco plc	United Kingdom

- \* SAM Sector Leader
- \*\* SAM Sector Mover

## **SECTOR STATISTICS**

Number of companies in universe	40
Number of companies assessed by SAM in 2011	23
Assessed companies to total companies in universe (%)	58
Market capitalization of assessed companies to total market capitalization (%)	83

## **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	66%	81%	31%
Environmental	43%	83%	31%
Social	49%	77%	38%

<sup>\*</sup> Average score of all assessed companies in the sector



# **Food Producers**

## **DRIVING FORCES**

Growth in the food sector will be driven by emerging market exposures, product innovation and participation in faster growing categories. Health, wellness and nutrition have emerged as strong growth categories and will remain in the spotlight of food manufacturers as more and more consumers become aware of the relationship between diet and health. Strong balance sheets across the industry have resulted in heightened M&A activity and should allow for further industry consolidation, particularly in the private label business. The sector's main challenges include rising raw material prices, which have put pressure on volumes and margins. Effective packaging and supply chain management can help reduce costs as well as ensure food safety, a key concern that highlights the need for quality control and transparency along the supply chain.

Country

#### HIGHLIGHTED CRITERIA

## **ECONOMIC DIMENSION**

- Health & Nutrition
- Corporate Governance
- Risk & Crisis Management
- Strategy for Emerging

## **ENVIRONMENTAL DIMENSION**

- Climate Strategy
- Environmental Policy/ Management System
- Environmental Reporting
- Raw Material Sourcing

## SOCIAL DIMENSION

- Human Capital Development
- Labor Practice Indicators
- Occupational Health & Safety
- Talent Attraction & Retention

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

Company

	Сопрапу	Country
SAM Gold Class	Unilever N.V. *	Netherlands
	Danone S.A.	France
SAM Silver Class	Nestle S.A.	Switzerland
SAM Bronze Class	Campbell Soup Co.	United States
	ConAgra Foods Inc. **	United States
	Grupo Nutresa S.A.	Colombia
	Kraft Foods Inc.	United States
	General Mills Inc.	United States
	H.J. Heinz Co.	United States
	Hershey Co.	United States
	Hormel Foods Corp.	United States
	Nongshim Co. Ltd.	South Korea
	Sara Lee Corp.	United States

<sup>\*</sup> SAM Sector Leader \*\* SAM Sector Mover

# SECTOR STATISTICS

Number of companies in universe	86
Number of companies assessed by SAM in 2011	38
Assessed companies to total companies in universe (%)	44
Market capitalization of assessed companies to total market capitalization (%)	75

# RESULTS AT SECTOR LEVEL



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	51%	85%	34%
Environmental	39%	90%	29%
Social	46%	77%	37%

 $<sup>\</sup>ensuremath{^{\star}}$  Average score of all assessed companies in the sector



# Forestry & Paper

## **DRIVING FORCES**

The forestry & paper sector comprises owners and operators of timber tracts, forest tree nurseries and sawmills as well as producers, converters, merchants and distributors of all grades of paper. The main challenge consists of ensuring responsible management of forests and plantations and responsible sourcing of wood fibers. Certification and chain of custody systems play an important role in gaining customers' trust and loyalty. The use of genetically modified organisms is increasing and poses new challenges that need to be addressed to minimize the risk of future liabilities. As paper becomes an even more customized product fulfilling client-specific needs, product innovation and customer focus will move up the corporate agenda. As a result, talent attraction and retention as well as human capital development remain a key source of competitive advantage. Technology-wise, room for considerable improvements in resource efficiency remains, and companies that introduce new technologies such as enzyme-based processes will secure a competitive advantage.

#### **HIGHLIGHTED CRITERIA**

## **ECONOMIC DIMENSION**

- Codes of Conduct/ Compliance/ Corruption & Bribery
- Corporate Governance
- Risk & Crisis Management
- Ecosystem Services

#### **ENVIRONMENTAL DIMENSION**

- Climate Strategy
- Product Stewardship
- Sustainable Fiber & Pulp Sourcing
- Sustainable Management of Forests

#### SOCIAL DIMENSION

- Human Capital Development
- Occupational Health & Safety
- Stakeholder Engagement
- Standards for Suppliers

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

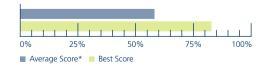
	Company	Country
SAM Gold Class	Fibria Celulose S.A. */**	Brazil
SAM Bronze Class	Stora Enso Oyj	Finland

- \* SAM Sector Leader
- \*\* SAM Sector Mover

## **SECTOR STATISTICS**

Number of companies in universe	13
Number of companies assessed by SAM in 2011	9
Assessed companies to total companies in universe (%)	69
Market capitalization of assessed companies to total market capitalization (%)	77

## **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	58%	89%	25%
Environmental	59%	91%	31%
Social	56%	82%	44%

<sup>\*</sup> Average score of all assessed companies in the sector



# **Furnishing**

## **DRIVING FORCES**

Innovation, quality and branding are the key differentiating factors in this sector. In addition, leading companies actively manage safety and environmental issues throughout the product life cycle. This includes the incorporation of new, innovative and environmentally friendly materials into products as well as take-back and recyclability guarantees for used products. Moreover, consumers increasingly demand products tailored to their needs, including a high level of comfort and adaptability, as well as transparent product information and labeling. The winners in the sector will be pioneers of innovative and environmentally friendly products that profit from a well-managed supply chain and a strong brand.

#### HIGHLIGHTED CRITERIA

## **ECONOMIC DIMENSION**

- Brand Management
- Corporate Governance
- Customer Relationship Management
- Risk & Crisis Management

## **ENVIRONMENTAL DIMENSION**

- Environmental Policy/ Management System
- Environmental Reporting
- Product Stewardship

## SOCIAL DIMENSION

- Human Capital Development
- Labor Practice Indicators
- Standards for Suppliers
- Talent Attraction & Retention

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

SAM Gold Class

Company Country

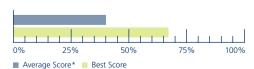
Herman Miller Inc. \*/\*\* United States

- \* SAM Sector Leader
- \*\* SAM Sector Mover

## **SECTOR STATISTICS**

Number of companies in universe	4
Number of companies assessed by SAM in 2011	3
Assessed companies to total companies in universe (%)	75
Market capitalization of assessed companies to total market capitalization (%)	75

# RESULTS AT SECTOR LEVEL



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	47%	69%	36%
Environmental	35%	77%	30%
Social	38%	57%	34%

 $<sup>\</sup>ensuremath{^{\star}}$  Average score of all assessed companies in the sector



# Gambling

## **DRIVING FORCES**

The gambling sector remains under intense scrutiny from the public and regulators: Legal changes, barriers to entry and deregulation of markets as well as compliance with anti-crime and money-laundering policies are key issues that affect a company's brand and license to operate. In addition, increased competition from Internet-based platforms has added pressure to traditional physical venues, which is compounded by a contraction in gambling-related tourism and disposable incomes. An increasing focus on online platforms and new markets to mitigate these demand shifts has raised concerns about online security and control of under-age and compulsive gambling. Industry leaders have profited from their proactive interaction with stakeholders and their commitment to initiatives and policies that help to mitigate the negative impact of gambling. In terms of environmental aspects, key challenges include the bottom-line effects of energy costs and public attention to the environmental impacts of infrastructure and operations.

#### **HIGHLIGHTED CRITERIA**

## **ECONOMIC DIMENSION**

- Anti-Crime Policy/Measures
- Brand Management
- Corporate Governance
- Risk & Crisis Management

#### **ENVIRONMENTAL DIMENSION**

- Environmental Reporting
- Environmental Policy/ Management System

## SOCIAL DIMENSION

- Human Capital Development
- Promoting Responsible Gaming
- Stakeholder Engagement
- Talent Attraction &

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

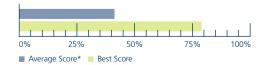
	Company	Country
SAM Gold Class	TABCorp Holdings Ltd. *	Australia
SAM Silver Class	Ladbrokes plc **	United Kingdom
	International Game Technology	United States
	Kangwon Land Inc.	South Korea

- \* SAM Sector Leader
- \*\* SAM Sector Mover

## **SECTOR STATISTICS**

Number of companies in universe	20
Number of companies assessed by SAM in 2011	12
Assessed companies to total companies in universe (%)	60
Market capitalization of assessed companies to total market capitalization (%)	76

## **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	47%	89%	42%
Environmental	25%	60%	15%
Social	41%	81%	43%

<sup>\*</sup> Average score of all assessed companies in the sector



# Gas Distribution

## **DRIVING FORCES**

Key trends affecting gas utilities include the liberalization of gas markets, increasing demand for natural gas in electricity generation, as well as higher demand for transportation capacity driven in part by the expansion of unconventional gas production. Natural gas is the least carbon-intensive fossil fuel and is therefore regarded as an effective option to replace coal as a base- and mid-load fuel and to reduce CO<sub>2</sub> emissions, depending on fuel and carbon dioxide prices. After Fukushima and with the development of unconventional resources, gas-fired power generation is expected to increase dramatically, especially in emerging countries like China. Changes in gas markets, combined with the effects of the Kyoto Protocol, are encouraging gas companies to enhance both supply-side and demand-side energy efficiency. The surge in gas demand and increased reliance on remote deposits also open up new prospects for transportation infrastructure. However, gas utilities remain exposed to intense competition, price volatility, potential opposition to large infrastructure projects, failure of distribution networks, and liabilities of former gas manufacturing sites.

#### HIGHLIGHTED CRITERIA

## **ECONOMIC DIMENSION**

- Corporate Governance
- Customer Relationship Management
- Market Opportunities
- Price Risk Management

## **ENVIRONMENTAL DIMENSION**

- Biodiversity
- Climate Strategy
- Environmental Reporting
- Transmission & Distribution

#### **SOCIAL DIMENSION**

- Human Capital Development
- Occupational Health & Safety
- Stakeholder Engagement
- Talent Attraction & Retention

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

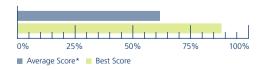
	Company	Country
SAM Gold Class	Enagas S.A. */**	Spain
SAM Silver Class	Gas Natural SDG S.A.	Spain
SAM Bronze Class	Snam Rete Gas S.p.A.	Italy
	Spectra Energy Corp.	United States

<sup>\*</sup> SAM Sector Leader

## **SECTOR STATISTICS**

Number of companies in universe	21
Number of companies assessed by SAM in 2011	13
Assessed companies to total companies in universe (%)	62
Market capitalization of assessed companies to total market capitalization (%)	80

## **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	64%	92%	40%
Environmental	54%	87%	28%
Social	63%	85%	32%

<sup>\*</sup> Average score of all assessed companies in the sector

<sup>\*\*</sup> SAM Sector Mover



# General Retailers

## **DRIVING FORCES**

The retail market is characterized by a continued shift toward multinational conglomerates with global supply and distribution systems, efficient inventory management and wide-scale marketing plans. Successful retailers continuously analyze customer information and habits to detect buying patterns and operate more responsive and efficient customer relationship management. E-commerce, home delivery services and pick-up systems are gaining importance among distribution channels. On an operational level, companies need to address the efficiency of their distribution systems and the use and disposal of packaging. Ethical sourcing has gained significance among various stakeholders and consumers have shown a willingness to pay a premium for companies that adopt healthy environmental practices. Within this context, retailers have to establish long-term relationships with suppliers and provide for enhanced transparency to minimize economic, social and reputational risks.

Country

## **HIGHLIGHTED CRITERIA**

## **ECONOMIC DIMENSION**

- Brand Management
- Corporate Governance
- Customer Relationship Management
- Risk & Crisis Management

## **ENVIRONMENTAL DIMENSION**

- Environmental Policy/ Management System
- Environmental Reporting
- Packaging

## SOCIAL DIMENSION

- Human Capital
- Labor Practice Indicators
- Stakeholder Engagement
- Standards for Suppliers

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

Company

SAM Gold Class
SAM Silver Class

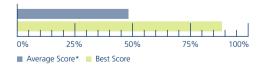
Company	Country
Lotte Shopping Co. Ltd. *	South Korea
Industria de Diseno Textil S.A.	Spain
Aeon Co. Ltd.	Japan
Gap Inc.	United States
Hennes & Mauritz AB **	Sweden
Home Retail Group plc	United Kingdom
Kingfisher plc	United Kingdom
Marks & Spencer Group plc	United Kingdom
Office Depot Inc.	United States
Seven & I Holdings Co. Ltd.	Japan
Staples Inc.	United States
Target Corp.	United States
Wal-Mart de Mexico S.A.B. de C.V.	Mexico
Wesfarmers Ltd.	Australia
Woolworths Holdings Ltd.	South Africa

<sup>\*</sup> SAM Sector Leader

## **SECTOR STATISTICS**

Number of companies in universe	89
Number of companies assessed by SAM in 2011	40
Assessed companies to total companies in universe (%)	45
Market capitalization of assessed companies to total market capitalization (%)	81

# RESULTS AT SECTOR LEVEL



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	49%	91%	42%
Environmental	44%	96%	24%
Social	50%	85%	34%

<sup>\*</sup> Average score of all assessed companies in the sector

<sup>\*\*</sup> SAM Sector Mover



# Healthcare Providers

## **DRIVING FORCES**

The healthcare sector includes health insurers as well as companies providing healthcare services or products, such as hospitals or consumer goods producers. Aging populations, unhealthy lifestyles in industrialized countries and largely unmet medical needs in developing countries are key trends affecting this sector. The fact that they result in higher use of healthcare services makes them key economic drivers. However, exploding healthcare costs and the growing divide in healthcare services among population groups or entire nations present major societal challenges that are being tackled through healthcare reform programs around the world. Leading companies take an active role in searching for solutions and building effective, sustainable healthcare systems by engaging with all the relevant stakeholder groups. The focus is on preventive medicine and services, better compliance, continuous improvement in customer-oriented services and strategic alliances across traditional business boundaries.

Country

#### **HIGHLIGHTED CRITERIA**

## **ECONOMIC DIMENSION**

- Risk & Crisis Management
- Brand Management
- Corporate Governance
- Customer Relationship Management

## **ENVIRONMENTAL DIMENSION**

- Climate Strategy
- Environmental Policy/ Management System
- Environmental Reporting

## SOCIAL DIMENSION

- Human Capital Development
- Labor Practice Indicators
- Standards for Suppliers
- Talent Attraction & Retention

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

Company

SAM Gold Class

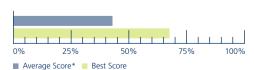
company	country
UnitedHealth Group Inc. */**	United States
Fresenius Medical Care AG & Co. KGaA	Germany
Humana Inc.	United States
Quest Diagnostics Inc.	United States

<sup>\*</sup> SAM Sector Leader \*\* SAM Sector Mover

## **SECTOR STATISTICS**

Number of companies in universe	28
Number of companies assessed by SAM in 2011	14
Assessed companies to total companies in universe (%)	50
Market capitalization of assessed companies to total market capitalization (%)	83

## **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	53%	75%	35%
Environmental	25%	65%	12%
Social	38%	69%	53%

 $<sup>\</sup>ensuremath{^{\star}}$  Average score of all assessed companies in the sector



# **Heavy Construction**

## **DRIVING FORCES**

The heavy construction sector includes companies engaged in the construction of commercial and residential buildings and infrastructure, as well as providers of services to construction companies. Companies are increasingly challenged by issues in such areas as operational health safety, energy efficiency and the responsible use of resources. Because the construction industry consumes massive amounts of resources to create the infrastructure and built environment, resource efficiency is not only limited to compliance with legal requirements, but also includes the active promotion of measures to reduce resource depletion. In a resource-constrained world, the establishment of a reputation as a resource-conscious construction services provider will be a source of competitive advantage. Whether a company can establish itself as a preferred contractor in future activities and projects also depends on its ability to handle and avoid antitrust and bribery cases. This means that the establishment and implementation of rigorous codes of conduct will be a key success factor.

#### **HIGHLIGHTED CRITERIA**

## **ECONOMIC DIMENSION**

- Corporate Governance
- Non-financial Project
   Evaluation
- Risk & Crisis Management
- Codes of Conduct/ Compliance/ Corruption & Bribery

#### **ENVIRONMENTAL DIMENSION**

- Building Materials
- Water Related Risks
- Resource Conservation & Resource Efficiency
- Transport & Logistics

#### SOCIAL DIMENSION

- Human Capital Development
- Labor Practice Indicators
- Occupational Health &
   Safety
- Talent Attraction & Retention

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

	Company	Country
SAM Gold Class	Hyundai Engineering & Construction Co., Ltd. *	South Korea
SAM Silver Class	GS Engineering & Construction Corp.	South Korea
SAM Bronze Class	Acciona S.A.	Spain
	Fomento de Construcciones y Contratas S.A.	Spain
	ACS Actividades de Construccion y Servicios S.A. **	Spain
	ries retividades de Constitucción y servicios s.r.	Spain
	Daelim Industrial Co. Ltd.	South Korea
	Ferrovial S.A.	Spain
	Hochtief AG	Germany

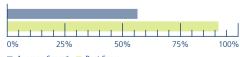
<sup>\*</sup> SAM Sector Leader

## **SECTOR STATISTICS**

Number of companies in universe	52
Number of companies assessed by SAM in 2011	29
Assessed companies to total companies in universe (%)	56
Market capitalization of assessed companies to total market capitalization (%)	72

## **RESULTS AT SECTOR LEVEL**

Total Score



■ Average Score\* ■ Best Score

Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	66%	93%	23%
Environmental	54%	92%	38%
Social	53%	88%	39%

<sup>\*</sup> Average score of all assessed companies in the sector

<sup>\*\*</sup> SAM Sector Mover



# Home Construction

## **DRIVING FORCES**

Growth in the home construction sector is strongly tied to general economic conditions. The prolonged downturn in the financial markets has impacted conditions for access to capital and slowed the pace for new developments in several regions of the globe. In addition, price pressures and tighter regulations remain constant challenges for the sector. Companies have to ensure that construction processes are run efficiently and in an environmentally friendly manner. This includes avoiding the use of harmful substances and increasing the recycling of generated waste. Companies that respond well to new technology developments such as low-energy, passive and plus-energy buildings are likely to remain at the forefront of this industry following increasing legislative pressure in the energy efficiency area. Commuting time, local amenities, green space, and energy conservation are all topics that need to be addressed in the early planning stages of property development. Occupational health & safety risks are high, requiring strict management practices to reduce the injury rate among employees and external contractors.

#### **HIGHLIGHTED CRITERIA**

## **ECONOMIC DIMENSION**

- Codes of Conduct/ Compliance Corruption & Bribery
- Corporate Governance
- Risk & Crisis Management

#### **ENVIRONMENTAL DIMENSION**

- Building Materials
- Environmental Reporting
- Environmental Policy/ Management System
- Resource Conservation & Resource Efficiency

#### SOCIAL DIMENSION

- Human Capital Development
- Occupational Health &
- Standards for Suppliers
- Talent Attraction & Retention

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

	Company	Country
SAM Gold Class	Sekisui Chemical Co. Ltd. */**	Japan
SAM Silver Class	Sumitomo Forestry Co. Ltd.	Japan

<sup>\*</sup> SAM Sector Leader

# **SECTOR STATISTICS**

Number of companies in universe	13
Number of companies assessed by SAM in 2011	9
Assessed companies to total companies in universe (%)	69
Market capitalization of assessed companies to total market capitalization (%)	74

# **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	60%	69%	18%
Environmental	49%	82%	37%
Social	33%	61%	45%

<sup>\*</sup> Average score of all assessed companies in the sector

<sup>\*\*</sup> SAM Sector Move



# Hotels, Restaurants, Bars & Recreational Services

## **DRIVING FORCES**

The key sustainability factors for the hotels, restaurants, bars & recreational services sector are linked to its employees, who drive the business and are the face of a company toward its customers. This makes it indispensable for companies to employ progressive human resource policies that include talent attraction and retention, human capital development, occupational health & safety, and group-wide ethical principles that cover the entire supply chain. Although environmental factors such as water and energy consumption play an important role, they are not considered to be the sector's key value drivers. Restaurant chains in particular need to advocate a balanced lifestyle, educate consumers and raise awareness of health risks associated with unbalanced diets.

#### **HIGHLIGHTED CRITERIA**

## **ECONOMIC DIMENSION**

- Brand Management
- Corporate Governance
- Food Safety
- Risk & Crisis Management

#### **ENVIRONMENTAL DIMENSION**

- Environmental Policy/ Management System
- Environmental Reporting

## SOCIAL DIMENSION

- Human Capital Development
- Stakeholder Engagement
- Standards for Suppliers
- Talent Attraction & Retention

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

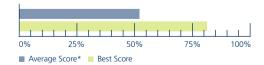
	Company	Country
SAM Gold Class	Sodexo S.A. *	France
SAM Silver Class	Accor S.A.	France
	Compass Group plc **	United Kingdom
SAM Bronze Class	McDonald's Corp.	United States

- \* SAM Sector Leader
- \*\* SAM Sector Mover

## **SECTOR STATISTICS**

Number of companies in universe	27
Number of companies assessed by SAM in 2011	14
Assessed companies to total companies in universe (%)	52
Market capitalization of assessed companies to total market capitalization (%)	77

## **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	64%	88%	32%
Environmental	37%	73%	18%
Social	49%	82%	50%

<sup>\*</sup> Average score of all assessed companies in the sector



# **Industrial Engineering**

## **DRIVING FORCES**

The main challenges and opportunities in the industrial equipment sector are associated with the use of products. Key issues include energy efficiency, safety, clean internal combustion and lean disposal options. Leading companies are increasingly focusing on product innovations and use life cycle analysis during product development to capitalize on customers' potential savings in equipment life cycle costs. Preparing for customers' present and future carbon constraints is an important aspect of product development. The focus on efficiency improvements for customers is becoming a potential advantage for companies selling into more resource-constrained markets, particularly in the emerging markets. Lengthening supply chains in emerging markets increase companies' potential exposure to human rights abuses and occupational health & safety issues. Sector leaders manage these risks as an integral component of their supply chain management.

## **HIGHLIGHTED CRITERIA**

## **ECONOMIC DIMENSION**

- Corporate Governance
- Customer Relationship Management
- Innovation Management
- Risk & Crisis Management

## **ENVIRONMENTAL DIMENSION**

- Climate Strategy
- Product Stewardship
- Environmental Policy/ Management System
- Water Related Risks

## SOCIAL DIMENSION

- Human Capital
- Development
- Labor Practice Indicators

  Occupational Health 8
- Occupational Health & Safety
- Standards for Suppliers

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

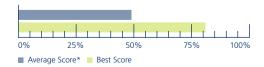
	Company	Country
SAM Gold Class	Fiat Industrial S.p.A. *	Italy
SAM Bronze Class	Alstom S.A.	France
	Atlas Copco AB	Sweden
	Volvo AB	Sweden
	ABB Ltd.	Switzerland
	Caterpillar Inc.	United States
	Cummins Inc.	United States
	Daikin Industries Ltd.	Japan
	IMI plc	United Kingdom
	Ingersoll-Rand plc	United States
	Komatsu Ltd.	Japan
	Mahindra & Mahindra Ltd.	India
	MAN SE **	Germany
	Metso Corp.	Finland
	Samsung Heavy Industries Co. Ltd.	South Korea
	Sandvik AB	Sweden
	SKF AB	Sweden
	STX Engine Co. Ltd.	South Korea
	Sulzer AG	Switzerland

<sup>\*</sup> SAM Sector Leader

## **SECTOR STATISTICS**

Number of companies in universe	117
Number of companies assessed by SAM in 2011	54
Assessed companies to total companies in universe (%)	46
Market capitalization of assessed companies to total market capitalization (%)	77

# RESULTS AT SECTOR LEVEL



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	55%	87%	30%
Environmental	46%	81%	33%
Social	48%	86%	37%

<sup>\*</sup> Average score of all assessed companies in the sector

<sup>\*\*</sup> SAM Sector Mover



# **Industrial Transportation**

## **DRIVING FORCES**

The industrial transportation sector facilitates trade and promotes economic development and efficiency gains. Companies can add value to their transportation offering by adding services such as customization and assembly of transported goods. Supply chain management may be used to reduce inventory and warehousing costs while speeding up delivery to the end customer. Integrated information systems can improve efficiency as ever faster movements of goods and people raise demand for energy and infrastructure. Companies can respond by using more environmentally friendly vehicles (e.g., electric vehicles for in-town deliveries), on the one hand, and by considering the needs of affected communities, on the other. The global nature of the business calls for strong leadership on such issues as climate change as well as human capital management and development.

#### **HIGHLIGHTED CRITERIA**

## **ECONOMIC DIMENSION**

- Codes of Conduct/ Compliance/ Corruption & Bribery
- Corporate Governance
- Risk & Crisis Management
- Customer Relationship Management

## **ENVIRONMENTAL DIMENSION**

- Climate Strategy
- Fuel Efficiency
- Environmental Reporting
- Environmental Policy/ Management System

## SOCIAL DIMENSION

- Human Capital Development
- Stakeholder Engagement
- Talent Attraction & Retention

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

	Company	Country
SAM Gold Class	PostNL *	Netherlands
	TNT Express N.V.	Netherlands
SAM Silver Class	Atlantia S.p.A.	Italy
SAM Bronze Class	Abertis Infraestructuras S.A.	Spain
	Deutsche Post AG	Germany
	Fraport AG **	Germany
	Transurban Group	Australia
	Canadian National Railway Co.	Canada
	Nippon Yusen K.K.	Japan
	United Parcel Service Inc.	United States

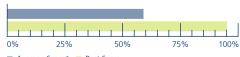
<sup>\*</sup> SAM Sector Leader

## **SECTOR STATISTICS**

Number of companies in universe	58
Number of companies assessed by SAM in 2011	30
Assessed companies to total companies in universe (%)	52
Market capitalization of assessed companies to total market capitalization (%)	77

## **RESULTS AT SECTOR LEVEL**

Total Score



■ Average Score\* ■ Best Score

Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	62%	96%	28%
Environmental	60%	99%	30%
Social	57%	93%	42%

<sup>\*</sup> Average score of all assessed companies in the sector

<sup>\*\*</sup> SAM Sector Mover



## Insurance

## **DRIVING FORCES**

Insurance is about managing risk. And as risks have crystallized manifold over the past year—be it in an unprecedented concentration of natural catastrophes or the fallout from the sovereign debt crisis—insurance companies are increasingly required to focus on sustainable business practice and risk management. Products and services offered include liability, life and health insurance as well as reinsurance and financial services. Because insurers rely on a motivated, highly qualified and experienced workforce to develop innovative products, attract and retain clients, they must invest in employee relations, remuneration systems and knowledge management. Climate change and resource scarcity have become important issues as natural disasters and relatively small events resulting from extreme weather conditions have well-known consequences for the insurance industry. Other issues include changing demographics, obesity, and other new health risks. Moreover, liability cases show that the insurance sector is closely tied to other economic sectors and is dependent on the political decision-making process.

#### HIGHLIGHTED CRITERIA

## **ECONOMIC DIMENSION**

- Codes of Conduct/ Compliance/ Corruption & Bribery
- Corporate Governance
- Customer Relationship Management
- Risk & Crisis Management

#### **ENVIRONMENTAL DIMENSION**

- Business Risks & Opportunities
- Environmental Policy/ Management System
- Environmental Reporting
- Risk Detection

#### SOCIAL DIMENSION

- Human Capital Development
- Labor Practice Indicators
- Occupational Health & Safety
- Talent Attraction & Retention

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

	Company	Country
SAM Gold Class	Swiss Re *	Switzerland
	Allianz SE	Germany
SAM Silver Class	Münchener Rückversicherungs-Gesellschaft AG	Germany
	NKSJ Holdings Inc.	Japan
	Storebrand ASA	Norway
	Tokio Marine Holdings Inc.	Japan
SAM Bronze Class	Aviva plc	United Kingdom
	AXA S.A.	France
	Dongbu Insurance Co. Ltd. **	South Korea
	Mapfre S.A.	Spain
	RSA Insurance Group plc	United Kingdom
	Standard Life plc	United Kingdom
	Zurich Financial Services AG	Switzerland
	Aegon N.V.	Netherlands
	ING Groep N.V.	Netherlands
	Insurance Australia Group Ltd.	Australia
	Legal & General Group plc	United Kingdom

<sup>\*</sup> SAM Sector Leader

## **SECTOR STATISTICS**

Number of companies in universe	115
Number of companies assessed by SAM in 2011	64
Assessed companies to total companies in universe (%)	56
Market capitalization of assessed companies to total market capitalization (%)	73

# RESULTS AT SECTOR LEVEL



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	61%	87%	33%
Environmental	44%	88%	28%
Social	39%	74%	39%

<sup>\*</sup> Average score of all assessed companies in the sector

<sup>\*\*</sup> SAM Sector Mover



# Leisure Goods

## **DRIVING FORCES**

This sector's key drivers include product differentiation, quality, time-to-market, and brand management. As a result, companies must focus on innovation and R&D to maintain their competitiveness in the fast-changing electronics and entertainment markets, where new products tend to become commoditized after a certain time on the market. New technologies and the need to provide ever-changing and more integrated product ranges are challenges that leading companies are managing through strategic alliances and outsourcing of operations. Excellent supply chain management that integrates environmental and social aspects is increasingly important to minimize economic, social and reputational risks. In this sense, companies must pay increasing attention to working conditions, particularly with regard to suppliers and subcontractors in developing countries. Environmental challenges arise throughout the product life span, requiring life cycle analysis, product modularity, the avoidance of toxic substances in both manufacturing processes and products, and effective take-back programs for the disposal of obsolete products.

## HIGHLIGHTED CRITERIA

## **ECONOMIC DIMENSION**

- Brand Management
- Corporate Governance
- Customer Relationship Management
- Risk & Crisis Management

## **ENVIRONMENTAL DIMENSION**

- Climate Strategy
- Hazardous Substances
- Environmental Policy/ Management System
- Product Stewardship

## SOCIAL DIMENSION

- Human Capital Development
- Labor Practice Indicators
- Standards for Suppliers
- Talent Attraction & Retention

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

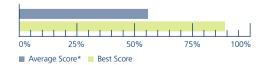
	Company	Country
SAM Gold Class	Philips Electronics N.V. *	Netherlands
	Panasonic Corp.	Japan
SAM Bronze Class	LG Electronics Inc. **	South Korea
	Konica Minolta Holdings Inc.	Japan

- \* SAM Sector Leader
- \*\* SAM Sector Mover

## **SECTOR STATISTICS**

Number of companies in universe	26
Number of companies assessed by SAM in 2011	15
Assessed companies to total companies in universe (%)	58
Market capitalization of assessed companies to total market capitalization (%)	85

## **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	56%	90%	37%
Environmental	53%	92%	29%
Social	59%	88%	34%

<sup>\*</sup> Average score of all assessed companies in the sector



# Media

## **DRIVING FORCES**

The heterogeneous and competitive publishing sector is becoming increasingly dependent on emerging technologies as a key growth driver; the digitization and electronic presentation of content is more important than ever. New technologies, coupled with innovative thinking, content and channel management are important factors in tapping new markets and creating new opportunities. Companies that consistently invest in retaining a talented, creative and motivated workforce while producing and continuously replenishing unique, valuable publishing content have led the sector. Rising literacy levels in the developing world offer the media industry a huge market and strong growth potential over the coming years. Social aspects such as non-discrimination of the workforce and cultural sensitivity toward clients and communities remain at the center of public attention and scrutiny. Given the media companies' power to shape public opinion, accountability, transparency and ethical advertising approaches are also important factors.

#### HIGHLIGHTED CRITERIA

## **ECONOMIC DIMENSION**

- Corporate Governance
- Customer Relationship Management
- Lobbying Activities
- Risk & Crisis Management

## **ENVIRONMENTAL DIMENSION**

- Environmental Policy/ Management System
- Environmental Reporting
- Hazardous Substances

## SOCIAL DIMENSION

- Code of Ethics for Advertising
- Human Capital Development
- Labor Practice Indicators
- Talent Attraction & Retention

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

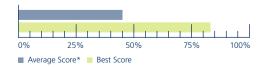
	Company	Country
SAM Gold Class	Pearson plc *	United Kingdom
SAM Bronze Class	Reed Elsevier N.V.	Netherlands
	Telenet Group Holding N.V. **	Belgium
	Wolters Kluwer N.V.	Netherlands
	British Sky Broadcasting Group plc	United Kingdom
	Dai Nippon Printing Co. Ltd.	Japan
	ITV plc	United Kingdom
	JCDecaux S.A.	France
	McGraw-Hill Companies	United States
	Television Française 1 S.A.	France
	Walt Disney Co.	United States
	WPP plc	United Kingdom

<sup>\*</sup> SAM Sector Leader

## **SECTOR STATISTICS**

Number of companies in universe	73
Number of companies assessed by SAM in 2011	42
Assessed companies to total companies in universe (%)	58
Market capitalization of assessed companies to total market capitalization (%)	83

# RESULTS AT SECTOR LEVEL



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	51%	83%	38%
Environmental	35%	94%	14%
Social	44%	83%	48%

<sup>\*</sup> Average score of all assessed companies in the sector

<sup>\*\*</sup> SAM Sector Mover



# **Medical Products**

## **DRIVING FORCES**

The medical equipment and service industry plays a critical role in improving the quality of life for patients with chronic diseases and enabling disabled individuals to lead a less restricted life by facilitating the detection and effective treatment of chronic conditions. Product/service quality and safety management as well as close relationships with different stakeholders, such as prescribers, payers and patients are essential to gaining customers' trust and ensuring successful product development. The sector will be affected by healthcare reform programs that will have an impact on reimbursement and pricing. On the other hand, moves to broaden healthcare coverage in emerging markets create new growth opportunities for this industry. Sustainable companies will have to adopt consistent, value— and stakeholder—oriented corporate strategies and governance systems based on effective human and intellectual capital management and a transparent reporting framework.

#### **HIGHLIGHTED CRITERIA**

## **ECONOMIC DIMENSION**

- Customer Relationship Management
- Marketing Practices
- Research & Development
- Corporate Governance

## **ENVIRONMENTAL DIMENSION**

- Climate Strategy
- Environmental Policy/ Management System
- Environmental Reporting

## SOCIAL DIMENSION

- Human Capital Development
- Labor Practice Indicators
- Occupational Health &
- Talent Attraction & Retention

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

SAM Gold Class

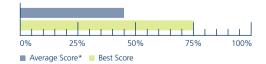
Company	Country
Baxter International Inc. *	United States
Becton Dickinson & Co.	United States
Coloplast A/S	Denmark
Colopiast 743	Definition
Elekta AB **	Sweden
Medtronic Inc.	United States
Smith & Nephew plc	United Kingdom

<sup>\*</sup> SAM Sector Leader

## **SECTOR STATISTICS**

Number of companies in universe	43
Number of companies assessed by SAM in 2011	23
Assessed companies to total companies in universe (%)	53
Market capitalization of assessed companies to total market capitalization (%)	80

## **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	56%	81%	40%
Environmental	39%	89%	10%
Social	37%	69%	50%

<sup>\*</sup> Average score of all assessed companies in the sector

<sup>\*\*</sup> SAM Sector Mover



# Mining

## **DRIVING FORCES**

The main sustainability issue facing the mining industry is that of declining ore grades which implies that, over time, more mineral ore needs to be extracted and processed in order to produce the same amount of metal. This is likely to exacerbate many of the environmental and social issues facing the mining & metals industry going forward. Prominent environmental issues include mineral waste management as well as the management of key inputs such as energy and water. Social issues mainly center on occupational health & safety as well as general labor conditions. Issues such as land rights, population relocations, use of private security forces to protect mining assets, and mine closures also remain controversial. Finally, and similarly to other extractive industries, the mining space is particularly susceptible to corruption, bribery, and other breaches of codes of conduct.

#### **HIGHLIGHTED CRITERIA**

## ECONOMIC DIMENSION

- Codes of Conduct/ Compliance/ Corruption & Bribery
- Corporate Governance
- Risk & Crisis Management
- Transparency

## ENVIRONMENTAL DIMENSION

- Biodiversity
- Climate Strategy
- Environmental Reporting
- Mineral Waste Management

## SOCIAL DIMENSION

- Human Capital Development
- Occupational Health & Safety
- Stakeholder Engagement
- Standards for Suppliers

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

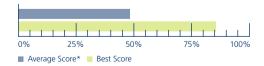
	Company	Country
SAM Gold Class	Xstrata plc *	United Kingdom
	Newmont Mining Corp.	United States
SAM Silver Class	Anglo American plc	United Kingdom
	Gold Fields Ltd.	South Africa
SAM Bronze Class	Barrick Gold Corp.	Canada
	BHP Billiton Group	United Kingdom
	Rio Tinto Group	Australia
	Teck Resources Ltd.	Canada
	Agnico-Eagle Mines Ltd.	Canada
	Anglo American Platinum Ltd.	South Africa
	AngloGold Ashanti Ltd.	South Africa
	Eramet S.A.	France
	Freeport-McMoRan Copper & Gold Inc.	United States
	Fresnillo plc	United Kingdom
	HudBay Minerals Inc.	Canada
	Kinross Gold Corp. **	Canada
	Lonmin plc	United Kingdom

<sup>\*</sup> SAM Sector Leader

## **SECTOR STATISTICS**

Number of companies in universe	108
Number of companies assessed by SAM in 2011	41
Assessed companies to total companies in universe (%)	38
Market capitalization of assessed companies to total market capitalization (%)	68

## **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	58%	92%	23%
Environmental	40%	81%	30%
Social	48%	86%	47%

<sup>\*</sup> Average score of all assessed companies in the sector

<sup>\*\*</sup> SAM Sector Mover



# Mobile Telecommunications

## **DRIVING FORCES**

The mobile communications sector has capitalized on the growth path paved by increasing mobile penetration and substantial technological advances in wireless computing. Customer-driven price pressure is becoming an increasing challenge. Key success factors include innovation, operational excellence, coherent service portfolios as well as a well-defined brand strategy capable of creating a competitive edge in a fast-moving market environment. Growing traffic must be reflected in network and capacity management strategies. Companies must proactively address potentially adverse health implications of electromagnetic fields resulting from wireless products. The ability to provide customized services based on stable multi-purpose equipment is emerging as a key differentiator. Efforts to bridge the digital divide have to be sustained by seizing investment opportunities in emerging countries.

#### **HIGHLIGHTED CRITERIA**

## **ECONOMIC DIMENSION**

- Corporate Governance
- Customer Relationship Management
- Privacy Protection
- Risk & Crisis Management

## **ENVIRONMENTAL DIMENSION**

- Climate Strategy
- Electromagnetic Fields
- Environmental Reporting
- Environmental Policy/ Management System

## SOCIAL DIMENSION

- Digital Inclusion
- Human Capital Development
- Labor Practice Indicators
- Talent Attraction & Retention

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

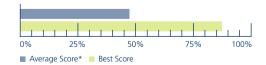
	Company	Country
SAM Gold Class	SK Telecom Co., Ltd. */**	South Korea
SAM Bronze Class	Deutsche Telekom AG	Germany
	China Mobile Ltd.	China
	Telenor ASA	Norway
	TeliaSonera AB	Sweden
	Vodafone Group plc	United Kingdom

<sup>\*</sup> SAM Sector Leader

## **SECTOR STATISTICS**

Number of companies in universe	40
Number of companies assessed by SAM in 2011	22
Assessed companies to total companies in universe (%)	55
Market capitalization of assessed companies to total market capitalization (%)	89

## **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	56%	88%	42%
Environmental	32%	91%	18%
Social	45%	85%	40%

<sup>\*</sup> Average score of all assessed companies in the sector

<sup>\*\*</sup> SAM Sector Mover



# Nondurable Household Products

## **DRIVING FORCES**

Strong product brands and innovative capabilities determine the competitive position of companies in this sector. Because they come into direct or indirect contact with the human body and end up in the natural environment, non-durable household products must be proven safe for human health and the environment. Product safety concerns increasingly influence new regulations but also drive new product innovations and reformulations. The changing regulatory environment also has an impact on production and operating costs through restrictions on emissions, energy consumption and water use. In addition, a sound strategy for engagement in emerging markets is increasingly likely to become a key success factor for companies in this sector. However, in order to be successful in these new markets, companies must adapt their product development and marketing strategies to the specific demands of these markets, and focus on providing value-adding products on a sufficiently small scale and at affordable prices.

## **HIGHLIGHTED CRITERIA**

## **ECONOMIC DIMENSION**

- Corporate Governance
- Innovation Management
- Risk & Crisis Management
- Strategy for Emerging
   Markets

## **ENVIRONMENTAL DIMENSION**

- Environmental Policy/ Management System
- Environmental Reporting
- Product Stewardship

#### SOCIAL DIMENSION

- Human Capital Development
- Labor Practice Indicators
- Standards for Suppliers
- Talent Attraction & Retention

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

SAM Gold Class

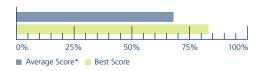
Company	Country
Henkel AG & Co. KGaA */**	Germany

- \* SAM Sector Leader
- \*\* SAM Sector Mover

## **SECTOR STATISTICS**

Number of companies in universe	9
Number of companies assessed by SAM in 2011	5
Assessed companies to total companies in universe (%)	56
Market capitalization of assessed companies to total market capitalization (%)	94

# RESULTS AT SECTOR LEVEL



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	69%	89%	43%
Environmental	73%	86%	22%
Social	62%	72%	35%

 $<sup>\</sup>ensuremath{^{\star}}$  Average score of all assessed companies in the sector



# Oil Equipment & Services

## **DRIVING FORCES**

As subcontractors to the oil and gas majors, drilling companies must adhere to the strictest environmental, health & safety (EHS) standards in order to win contracts. Given the concerns over reputational risk in the exploration and production sector, drilling companies are by default safeguarding the brand of the majors. As a result, EHS excellence and responsible management of social and political issues in often highly sensitive areas represent critical success factors. Technological innovation is driving the profitability of drilling companies as advanced seismic and deep-water technologies become the new frontier in oil exploration against the backdrop of increasingly smaller and less accessible oil fields. The oil and gas sector continues to be challenged on the human resources front, with an aging workforce, strong competition for highly skilled experts, and an insufficient number of newly trained and qualified graduates in oil-related fields. The boom-and-bust patterns that have characterized the sector in the past have prompted many trained engineers to leave the sector. As a result, a shortage of engineers is a real challenge today.

#### **HIGHLIGHTED CRITERIA**

## ECONOMIC DIMENSION

- Corporate Governance
- Customer Relationship Management
- Risk & Crisis Management
- Codes of Conduct/ Compliance/ Corruption & Bribery

#### **ENVIRONMENTAL DIMENSION**

- Releases to the Environment
- Environmental Policy/ Management System
- Environmental Reporting

#### SOCIAL DIMENSION

- Human Capital Development
- Labor Practice Indicators
- Occupational Health & Safety
- Talent Attraction & Retention

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

	Company	Country
SAM Gold Class	AMEC plc *	United Kingdom
SAM Bronze Class	Technip S.A. **	France
	CGG Veritas	France
	Halliburton Co.	United States
	Saipem S.p.A.	Italy
	SBM Offshore N.V.	Netherlands
	Schlumberger Ltd.	United States
	SembCorp Industries Ltd.	Singapore

<sup>\*</sup> SAM Sector Leader

## **SECTOR STATISTICS**

Number of companies in universe	49
Number of companies assessed by SAM in 2011	23
Assessed companies to total companies in universe (%)	47
Market capitalization of assessed companies to total market capitalization (%)	81

# RESULTS AT SECTOR LEVEL

Total Score

Social



Dimension	Average Score *	Best Score	Weighting ir Total Score
Economic	62%	82%	25%
Environmental	21%	78%	24%

73%

51%

33%

<sup>\*\*</sup> SAM Sector Mover

<sup>\*</sup> Average score of all assessed companies in the sector



# Oil & Gas Producers

## **DRIVING FORCES**

The ability to sustain long-term value creation for oil and gas companies will depend in particular on access to next-generation assets. Companies are struggling with increasing exploration and development costs from smaller reserves with complex geology in deeper waters, rising taxes outside low-risk OECD regions, and mounting costs of oil services and manpower. As a result, keeping down the cost base will be crucial for the industry. As the environment becomes more diverse and the challenges more complex, oil and gas companies are increasingly faced with a shortage of skilled workers. In addition, as exploration moves to remote and environmentally sensitive locations, environmental, health & safety excellence, coupled with progressive management of social issues, will remain important aspects of energy companies' long-term profitability. As for environmental issues, the carbon challenge continues to top the agenda. Active corporate strategies that seek out related business opportunities and mitigate carbon risks will be a driving force in securing companies' future competitiveness.

Country

#### **HIGHLIGHTED CRITERIA**

## **ECONOMIC DIMENSION**

- Corporate Governance
- Exploration & Production
- Gas Portfolio
- Risk & Crisis Management

#### **ENVIRONMENTAL DIMENSION**

- Biodiversity
- Climate Strategy
- Environmental Reporting
- Refining/Cleaner Fuels

#### SOCIAL DIMENSION

- Human Capital Development
- Labor Practice Indicators
- Social Impacts on Communities
- Talent Attraction & Retention

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

Company

SAM Gold Class
SAM Silver Class
SAM Bronze Class

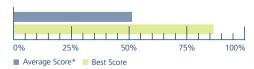
, ,	*
Repsol YPF S.A. *	Spain
Woodside Petroleum Ltd.	Australia
ENI S.p.A.	Italy
Sasol Ltd.	South Africa
S-Oil Corp.	South Korea
Total S.A.	France
BG Group plc	United Kingdom
Cenovus Energy Inc.	Canada
Ecopetrol S.A.	Colombia
Galp Energia, SGPS, S.A. **	Portugal
MOL Group	Hungary
Neste Oil Oyj	Finland
Nexen Inc.	Canada
Petroleo Brasileiro S/A	Brazil
PTT PCL	Thailand
Santos Ltd.	Australia
Statoil ASA	Norway
Suncor Energy Inc.	Canada

<sup>\*</sup> SAM Sector Leader

## **SECTOR STATISTICS**

Number of companies in universe	118
Number of companies assessed by SAM in 2011	64
Assessed companies to total companies in universe (%)	54
Market capitalization of assessed companies to total market capitalization (%)	86

# **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	60%	86%	39%
Environmental	41%	90%	27%
Social	48%	88%	34%

<sup>\*</sup> Average score of all assessed companies in the sector

<sup>\*\*</sup> SAM Sector Mover



# Personal Products

## **DRIVING FORCES**

Strong product brands and innovative strength determine the competitive position of companies in this sector. Because they come into direct or indirect contact with the human body and end up in the natural environment, personal products must be proven safe for human health and the environment. Product safety concerns increasingly influence new regulations but also drive new product innovations and reformulations. The changing regulatory environment also has an impact on production and operating costs through restrictions on emissions, energy consumption and water use. Revenue growth is strongly linked to a growing presence in emerging markets. To successfully serve the growing number of consumers in these markets, however, companies must offer affordable products adapted to local needs, and implement different marketing strategies than in developed markets.

#### HIGHLIGHTED CRITERIA

## **ECONOMIC DIMENSION**

- Corporate Governance
- Innovation Management
- Risk & Crisis Management
- Strategy for Emerging

## **ENVIRONMENTAL DIMENSION**

- Environmental Policy/ Management System
- Environmental Reporting
- Product Stewardship

## SOCIAL DIMENSION

- Human Capital Development
- Labor Practice Indicators
- Standards for Suppliers
- Talent Attraction & Retention

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

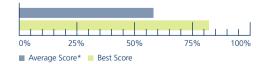
	Company	Country
SAM Gold Class	Amorepacific Corp. *	South Korea
SAM Silver Class	Colgate-Palmolive Co.	United States
	LG Household & Health Care Ltd. **	South Korea

<sup>\*</sup> SAM Sector Leader

## **SECTOR STATISTICS**

Number of companies in universe	19
Number of companies assessed by SAM in 2011	14
Assessed companies to total companies in universe (%)	74
Market capitalization of assessed companies to total market capitalization (%)	91

## **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	61%	87%	43%
Environmental	58%	86%	22%
Social	56%	81%	35%

<sup>\*</sup> Average score of all assessed companies in the sector

<sup>\*\*</sup> SAM Sector Mover



# Pharmaceuticals.

## **DRIVING FORCES**

The pharmaceutical industry is a research- and development-driven sector that relies on new drugs with high sales potential. Despite heavy investments, declining R&D efficiency and innovation result in limited drug pipelines. At the same time, the industry is facing a patent cliff as the patents of major pharmaceutical products are about to expire, opening the door to severe competition from generics. To preserve their profitability and generate higher returns, companies must increasingly engage in licensing and acquisitions, along with smarter R&D spending. On the market side, governments struggling with rising fiscal deficits have cut healthcare budgets, putting pressure on drug pricing and fueling a debate about the cost-benefit ratio of many pharmaceutical products. As a result, key challenges for the sector include the therapeutic and cost effectiveness of drugs, access to and compliance of therapeutic treatments, as well as changing distribution models. In addition, pharmaceutical companies may face complex ethical discussions related to pharmacogenomics and drug safety issues.

#### **HIGHLIGHTED CRITERIA**

## **ECONOMIC DIMENSION**

- Corporate Governance
- Customer Relationship
- Marketing Practices
- Research & Development

## **ENVIRONMENTAL DIMENSION**

- Climate Strategy
- Environmental Policy/ Management System
- Environmental Reporting

## SOCIAL DIMENSION

- Human Capital Development
- Labor Practice Indicators
- Standards for Suppliers
- Talent Attraction & Retention

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

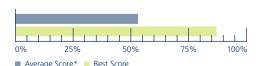
	Company	Country
SAM Gold Class	Roche Holding AG *	Switzerland
	AstraZeneca plc **	United Kingdom
	Novartis AG	Switzerland
	Novo Nordisk A/S	Denmark
SAM Silver Class	Abbott Laboratories	United States
SAM Bronze Class	GlaxoSmithKline plc	United Kingdom
	Merck & Co., Inc.	United States
	Sanofi S.A.	France
	Allergan Inc.	United States
	Johnson & Johnson	United States

<sup>\*</sup> SAM Sector Leader \*\* SAM Sector Mover

# **SECTOR STATISTICS**

Number of companies in universe	63
Number of companies assessed by SAM in 2011	32
Assessed companies to total companies in universe (%)	51
Market capitalization of assessed companies to total market capitalization (%)	93

## **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	60%	87%	40%
Environmental	52%	93%	10%
Social	47%	87%	50%

<sup>\*</sup> Average score of all assessed companies in the sector



# **Pipelines**

## **DRIVING FORCES**

The need to transport energy—both fossil fuels and renewables—from politically and environmentally sensitive areas to demand-intensive geographic regions is driving value creation in the pipeline sector. To minimize future environmental costs, pipeline companies need to adopt state-of-the art management systems to prevent leakages and emissions along their pipelines, supported by modern risk and crisis management systems. Moreover, the security of pipeline systems is vital to ensuring a constant energy supply from politically sensitive regions. As a result, human rights issues and stakeholder communication are becoming increasingly important in planning and operating pipelines in emerging countries. By adopting progressive community relations management systems, pipeline companies can reduce their exposure to human rights risks and cut their operating costs, thereby gaining a sustainable competitive advantage.

#### HIGHLIGHTED CRITERIA

## ECONOMIC DIMENSION

- Corporate Governance
- Customer Relationship Management
- Diversification
- Risk & Crisis Management

## **ENVIRONMENTAL DIMENSION**

- Environmental Policy/ Management System
- Environmental Reporting

#### SOCIAL DIMENSION

- Human Capital
- Labor Practice Indicators
- Occupational Health &
- Talent Attraction & Retention

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

Company Country

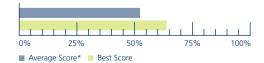
SAM Gold Class TransCanada Corp. \*/\*\* Canada

- \* SAM Sector Leader
- \*\* SAM Sector Mover

## **SECTOR STATISTICS**

Number of companies in universe	5
Number of companies assessed by SAM in 2011	4
Assessed companies to total companies in universe (%)	80
Market capitalization of assessed companies to total market capitalization (%)	94

## **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	67%	72%	31%
Environmental	32%	44%	24%
Social	52%	75%	45%

<sup>\*</sup> Average score of all assessed companies in the sector



# Real Estate

## **DRIVING FORCES**

The real estate industry is a heterogeneous sector that comprises developers and maintenance professionals as well as residential and commercial property managers and investors. Climate change and energy efficiency are of great importance for this sector. Increasing energy costs have made the amount of operational energy used in buildings a distinctive factor in determining their attractiveness. Buildings with low energy intensity that use innovative materials reduce the impact of volatile energy costs and prices, boosting demand for residential, commercial and industrial green buildings. Commercial tenants increasingly demand low-energy buildings to fulfill their sustainability commitments. In addition, the development of strict energy-efficiency regulations for buildings, including the introduction of energy performance certificates in Europe, is driving demand for sustainable buildings. A similar trend, though less significant, can be observed with regard to water efficiency and greenhouse gas emissions.

## **HIGHLIGHTED CRITERIA**

## **ECONOMIC DIMENSION**

- Codes of Conduct/ Compliance/ Corruption & Bribery
- Corporate Governance
- Risk & Crisis Management
- Stakeholder Engagement

#### **ENVIRONMENTAL DIMENSION**

- Biodiversity
- Building Materials
- Environmental Reporting
- Resource Conservation & Resource Efficiency

#### SOCIAL DIMENSION

- Human Capital Development
- Labor Practice Indicators
- Social Integration
- Talent Attraction &

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

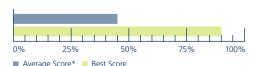
	Company	Country
SAM Gold Class	Stockland *	Australia
	GPT Group	Australia
SAM Bronze Class	Hammerson plc	United Kingdom
	British Land Co. Plc	United Kingdom
	Capital Shopping	
	Centres Group plc	United Kingdom
	CapitaLand Ltd.	Singapore
	CFS Retail Property Trust	Australia
	City Developments Ltd.	Singapore
	Commonwealth Property	
	Office Fund	Australia
	CORIO N.V.	Netherlands

Company	Country
Dexus Property Group	Australia
Gecina	France
Hysan Development Co. Ltd.	Hong Kong
Keppel Land Ltd. **	Singapore
Klepierre S.A.	France
Land Securities Group plc	United Kingdom
Lend Lease Group	Australia
SEGRO plc	United Kingdom
Shaftesbury plc	United Kingdom
Unibail-Rodamco S.A.	France

## **SECTOR STATISTICS**

Number of companies in universe	135
Number of companies assessed by SAM in 2011	59
Assessed companies to total companies in universe (%)	44
Market capitalization of assessed companies to total market capitalization (%)	67

# RESULTS AT SECTOR LEVEL



Average Score *	Best Score	Weighting in Total Score
65%	95%	26%
39%	91%	39%
38%	88%	35%
	Score * 65% 39%	Score * Score 65% 95% 39% 91%

<sup>\*</sup> Average score of all assessed companies in the sector

<sup>\*</sup> SAM Sector Leader

<sup>\*\*</sup> SAM Sector Mover



# Renewable Energy Equipment

## **DRIVING FORCES**

Demand for energy from alternative (renewable) sources is still primarily driven by government support in the form of feed-in tariffs. Due to the higher cost of alternative energy, additional incentives are required to stimulate investments in the sector. Going forward, however, we expect government support to become a less important driver of demand. Rapidly declining costs and increasing efficiencies in some of the more expensive technologies, solar in particular, lead us to expect accelerated progress toward competitiveness with traditional energy sources. More mature technologies such as wind still offer potential for efficiency enhancements, but the main focus will be on improving turbine quality. With improving economics and increasing government support in emerging markets, particularly in China, we expect alternative energy to command a growing share of the global electricity mix. Given our strong growth projections for the sector, it is also becoming increasingly important to examine the way companies conduct their business activities and whether they are managing their growth in a sustainable manner.

#### **HIGHLIGHTED CRITERIA**

## ECONOMIC DIMENSION

- Codes of Conduct/ Compliance/ Corruption & Bribery
- Corporate Governance
- Customer Relationship Management
- Risk & Crisis Management

#### **ENVIRONMENTAL DIMENSION**

- Climate Strategy
- Environmental Reporting
- Product Stewardship

#### SOCIAL DIMENSION

- Human Capital Development
- Occupational Health & Safety
- Standards for Suppliers
- Talent Attraction &

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

Company Country

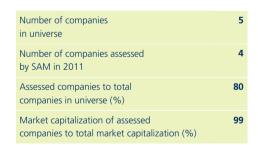
Vestas Wind Systems A/S \*/\*\* Denmark

\* SAM Sector Leader

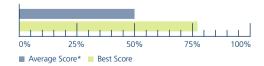
SAM Gold Class

\*\* SAM Sector Mover

## **SECTOR STATISTICS**



# RESULTS AT SECTOR LEVEL



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	56%	79%	34%
Environmental	46%	82%	29%
Social	47%	71%	37%

<sup>\*</sup> Average score of all assessed companies in the sector



# Semiconductors

## **DRIVING FORCES**

As a key segment of the electronic supply chain, the semiconductor sector must continuously innovate in order to respond to the need for resource efficiency and miniaturization. The main issues include energy-efficient production processes and low energy consumption chips and processors. Quality, performance and reliability need to be monitored throughout the entire value chain. The sector must also address the environmental impacts of its own operations, for example by reducing the use of chemicals and hazardous substances and waste, enhancing the energy efficiency of ultraclean spaces, and by reducing consumption of ultra-pure water. High-quality research and development are important success factors as shrinkage, migration to new materials and the introduction of more efficient production processes are the dominant trends. Considering the long lead time of capacity extensions, the semiconductor sector's extreme cyclicality is forcing companies to pay close attention to strategic planning and business cycle management. Companies have to continually attract new talent to ensure their long-term innovative capabilities.

#### **HIGHLIGHTED CRITERIA**

## **ECONOMIC DIMENSION**

- Corporate Governance
- Customer Relationship
- Product Quality & Recall Management
- Risk & Crisis Management

#### **ENVIRONMENTAL DIMENSION**

- Climate Strategy
- Environmental Policy/ Management System
- Product Stewardship

## SOCIAL DIMENSION

- Human Capital Development
- Labor Practice Indicators
- Standards for Suppliers
- Talent Attraction & Retention

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

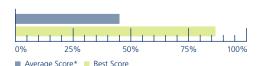
	Company	Country
SAM Gold Class	Samsung Electronics Co. Ltd. */**	South Korea
	Intel Corp.	United States
SAM Bronze Class	Hynix Semiconductor Inc.	South Korea
	${\it Taiwan Semiconductor Manufacturing Co. Ltd.}$	Taiwan
	United Microelectronics Corp.	Taiwan
	ASML Holding N.V.	Netherlands
	Infineon Technologies AG	Germany
	Rohm Co. Ltd.	Japan

<sup>\*</sup> SAM Sector Leader \*\* SAM Sector Mover

# SECTOR STATISTICS

Number of companies in universe	56
Number of companies assessed by SAM in 2011	31
Assessed companies to total companies in universe (%)	55
Market capitalization of assessed companies to total market capitalization (%)	87

# RESULTS AT SECTOR LEVEL



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	55%	88%	33%
Environmental	37%	90%	35%
Social	42%	86%	32%

<sup>\*</sup> Average score of all assessed companies in the sector



# Software

## **DRIVING FORCES**

Higher productivity targets and increased data collection requirements combined with a continuously changing regulatory framework increases demand for information technology. The software sector is characterized by a fast-paced market environment in which the speed of innovation represents a key success factor. As innovation is closely linked to human capital, efficient human resource management is vital for attracting and retaining qualified staff. In view of rapidly broadening customer needs, software companies need to adapt their solutions to fulfill more specific and customized tasks while keeping development costs under control. Increasing competition from emerging markets requires software companies to address intellectual property issues. Given the ubiquity of software in daily life, innovative and differentiated distribution models are gaining importance. Widespread Internet access, for example, creates new opportunities in the area of "software as a service." In addition, software companies have to make increasing efforts to attract external developers.

#### HIGHLIGHTED CRITERIA

## ECONOMIC DIMENSION

- Corporate Governance
- Customer Relationship Management
- Privacy Protection
- Risk & Crisis Management

## **ENVIRONMENTAL DIMENSION**

- Climate Strategy
- Environmental Policy/ Management System
- Environmental Reporting

## SOCIAL DIMENSION

- Human Capital Development
- Labor Practice Indicators
- Standards for Suppliers
- Talent Attraction & Retention

## **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

SAM Gold Class

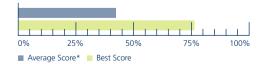
Company	Country
SAP AG *	Germany
Invensys plc	United Kingdom
Autodesk Inc. **	United States
CA Inc.	United States
Intuit Inc.	United States
Symantec Corp.	United States
Trend Micro Inc.	Japan

- \* SAM Sector Leader
- \*\* SAM Sector Mover

## **SECTOR STATISTICS**

Number of companies in universe	40
Number of companies assessed by SAM in 2011	18
Assessed companies to total companies in universe (%)	45
Market capitalization of assessed companies to total market capitalization (%)	87

## **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	52%	81%	47%
Environmental	32%	91%	20%
Social	36%	72%	33%

<sup>\*</sup> Average score of all assessed companies in the sector



## **Specialized Consumer Services**

#### **DRIVING FORCES**

Companies in this sector are service providers engaged in a wide range of businesses. Sector-specific challenges include the need to attract new and retain existing customers while expanding into new markets, continuously training employees and improving customer satisfaction. Companies need to strengthen their brand, improve their reputation and minimize any negative social and environmental impacts. Technological advances—particularly those related to Internet, electronic billing, privacy protection, real-time service and customer information—present opportunities for companies in this sector. Meanwhile, companies face the challenge of securing customer identity, building trust and loyalty, while simultaneously improving operational efficiencies.

#### **HIGHLIGHTED CRITERIA**

#### **ECONOMIC DIMENSION**

- Brand Management
- Corporate Governance
- Customer Relationship Management
- Privacy Protection

#### **ENVIRONMENTAL DIMENSION**

- Environmental Policy/ Management System
- Environmental Reporting

#### SOCIAL DIMENSION

- Human Capital Development
- Labor Practice Indicators
- Stakeholder Engagement
- Talent Attraction & Retention

### **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

Company Country

SAM Gold Class Benesse Holdings Inc. \*/\*\* Japan

H&R Block Inc. United States

\* SAM Sector Leader
\*\* SAM Sector Mover

### **SECTOR STATISTICS**

Number of companies in universe	13
Number of companies assessed by SAM in 2011	7
Assessed companies to total companies in universe (%)	54
Market capitalization of assessed companies to total market capitalization (%)	76

### **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	49%	74%	45%
Environmental	22%	55%	17%
Social	32%	54%	38%

 $<sup>\</sup>ensuremath{^{\star}}$  Average score of all assessed companies in the sector



### Steel

#### **DRIVING FORCES**

One of the challenges faced by the iron and steel producing sector is the successful management of  ${\rm CO_2}$  constraints and climate change risks. Numerous steel companies are developing technologies to reduce the  ${\rm CO_2}$  intensity of the steel making process. Any breakthrough would represent a considerable competitive advantage, not only within the industry itself, but also in competition with the aluminum sector. In addition to greenhouse gas emissions, a reduction of airborne emissions of heavy metals, dioxins and furans, as well as recycling and reuse of waste, will feature prominently on companies' future agendas. The consolidation seen in the steel sector over the last few years is likely to continue into the future. Competition will intensify as new players from Russia and China enter the market. In this context, successful supply chain management will become even more important as a means of counteracting this competitive pressure.

#### **HIGHLIGHTED CRITERIA**

#### **ECONOMIC DIMENSION**

- Codes of Conduct/ Compliance/ Corruption & Bribery
- Corporate Governance
- Risk & Crisis Management
- Customer Relationship Management

#### **ENVIRONMENTAL DIMENSION**

- Climate Strategy
- Environmental Policy/ Management System
- Environmental Reporting

#### SOCIAL DIMENSION

- Human Capital Development
- Labor Practice Indicators
- Occupational Health & Safety
- Standards for Suppliers

### **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

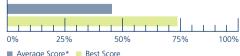
	Company	Country
SAM Gold Class	Rautaruukki Oyj */**	Finland
SAM Silver Class	ArcelorMittal	France
	Outokumpu Oyj	Finland
	POSCO	South Korea
	Cliffs Natural Resources Inc.	United States
	Hyundai Steel Co.	South Korea
	Tata Steel Ltd.	India
	Usinas Siderurgicas de Minas Gerais S/A	Brazil

<sup>\*</sup> SAM Sector Leader

### **SECTOR STATISTICS**

Number of companies in universe	49
Number of companies assessed by SAM in 2011	22
Assessed companies to total companies in universe (%)	45
Market capitalization of assessed companies to total market capitalization (%)	73

### **RESULTS AT SECTOR LEVEL**



Average	Score*	Best	Score	

Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	54%	84%	24%
Environmental	41%	87%	30%
Social	44%	73%	46%

<sup>\*</sup> Average score of all assessed companies in the sector

<sup>\*\*</sup> SAM Sector Mover



## **Support Services**

#### **DRIVING FORCES**

For companies engaged in providing industrial services, employees are the main interface with customers and therefore play a critical role in the success of the business. Clear policies for employees and contractors combined with training programs, knowledge management and incentive schemes are important for creating a motivating, successful, safe and healthy working environment. Companies have to systematically measure and improve customer satisfaction to maintain their competitive edge. Some companies in the sector have a higher exposure to environmental and human rights issues. Trading companies that acquire stakes in or operate large-scale projects such as exploration activities should control risks by integrating environmental and social impact assessments into their investment decisions and provide transparent reporting about such engagements. Further, support services companies may risk transferring reputational risks onto their customers if their suppliers are found to be involved in any environmental or human rights abuses, and should therefore proactively engage their suppliers on such topics.

#### **HIGHLIGHTED CRITERIA**

#### **ECONOMIC DIMENSION**

- Corporate Governance
- Customer Relationship Management
- Risk & Crisis Management
- Codes of Conduct/ Compliance/ Corruption & Bribery

#### **ENVIRONMENTAL DIMENSION**

- Environmental Policy/ Management System
- Environmental Reporting

#### SOCIAL DIMENSION

- Human Capital Development
- Labor Practice Indicators
- Occupational Health & Safety
- Standards for Suppliers

### **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

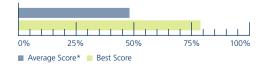
Company	Country
Marubeni Corp. *	Japan
Capita Group plc **	United Kingdom
Kepco Plant Service & Engineering Co. Ltd.	South Korea
Mitsui & Co. Ltd.	Japan
	6 % 1 1
Adecco S.A.	Switzerland
Experian plc	United Kingdom
Itochu Corp.	Japan
Mitsubishi Corp.	Japan
Premier Farnell plc	United Kingdom
Rentokil Initial plc	United Kingdom
	Marubeni Corp. *  Capita Group plc **  Kepco Plant Service & Engineering Co. Ltd.  Mitsui & Co. Ltd.  Adecco S.A.  Experian plc  Itochu Corp.  Mitsubishi Corp.  Premier Farnell plc

<sup>\*</sup> SAM Sector Leader

### **SECTOR STATISTICS**

Number of companies in universe	68
Number of companies assessed by SAM in 2011	39
Assessed companies to total companies in universe (%)	57
Market capitalization of assessed companies to total market capitalization (%)	76

### RESULTS AT SECTOR LEVEL



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	54%	87%	29%
Environmental	40%	82%	25%
Social	45%	74%	46%

<sup>\*</sup> Average score of all assessed companies in the sector

<sup>\*\*</sup> SAM Sector Mover



## Tobacco

#### **DRIVING FORCES**

The tobacco sector is mature and global cigarette volumes are stable. However, tobacco companies enjoy a unique position in the consumer sector as they have strong pricing power and are able to raise cigarette prices. The sector's relationship to the public sector is of fundamental importance with regard to tax policy and efforts to combat cigarette smuggling. Companies will have to prove that they have a robust system in place to track their product distribution. The sector is under constant scrutiny from legislators, the media and NGOs, requiring a high level of transparency and well-managed companies and supply chains. Following new smoke regulating legislation, it will also be increasingly important for tobacco companies to partly move away from traditional tobacco products and start exploring options in the area of non-combustion tobacco, such as snus, and non-tobacco nicotine products, both of which claim to have a lower health impact.

#### HIGHLIGHTED CRITERIA

#### **ECONOMIC DIMENSION**

- Combating Smuggling
- Corporate Governance
- Risk & Crisis Management
- Customer Relationship Management

#### **ENVIRONMENTAL DIMENSION**

- Environmental Policy/ Management System
- Raw Material Sourcing
- Fuels for Tobacco Curing
- Environmental Reporting

#### SOCIAL DIMENSION

- Human Capital Development
- Labor Practice Indicators
- Responsible Marketing Policies
- Talent Attraction &

### **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

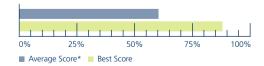
	Company	Country
SAM Gold Class	British American Tobacco plc */**	United Kingdom
SAM Bronze Class	KT&G Corp.	South Korea

- \* SAM Sector Leader
- \*\* SAM Sector Mover

### **SECTOR STATISTICS**

Number of companies in universe	12
Number of companies assessed by SAM in 2011	10
Assessed companies to total companies in universe (%)	83
Market capitalization of assessed companies to total market capitalization (%)	98

### **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	68%	93%	32%
Environmental	64%	93%	25%
Social	52%	83%	43%

<sup>\*</sup> Average score of all assessed companies in the sector



## Travel & Tourism

#### **DRIVING FORCES**

Companies in the travel and tourism sector generally benefit from the development of the local economies in which they operate, and vice versa. While it is essential for these companies to ensure environmentally friendly operations, for example, by using and promoting alternative energies and means of transport, key sustainability challenges lie in the social arena. It is indispensable for companies in this sector to employ progressive human resources policies that include talent attraction & retention, human capital development, occupational health & safety and group-wide ethical principles that prevent involvement in illegal practices. In view of continually increasing transport flows, companies also need to consider the needs of local communities in the tourist destinations in which they operate. Companies must conduct careful analyses of locations and the supply chain to ensure their long-term ability to deliver services.

#### **HIGHLIGHTED CRITERIA**

#### **ECONOMIC DIMENSION**

- Codes of Conduct/ Compliance/ Corruption & Bribery
- Corporate Governance
- Risk & Crisis Management

#### **ENVIRONMENTAL DIMENSION**

- Climate Strategy
- Environmental Policy/ Management System
- Environmental Reporting

#### SOCIAL DIMENSION

- Human Rights & Corruption
- Human Capital Development
- Stakeholder Engagement
- Occupational Health &

### **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

	Company	Country
SAM Gold Class	TUI AG *	Germany
SAM Silver Class	TUI Travel plc **	United Kingdom
SAM Bronze Class	Firstgroup plc	United Kingdom
	MTR Corp. Ltd.	Hong Kong

<sup>\*</sup> SAM Sector Leader

### **SECTOR STATISTICS**

Number of companies in universe	27
Number of companies assessed by SAM in 2011	14
Assessed companies to total companies in universe (%)	52
Market capitalization of assessed companies to total market capitalization (%)	69

### **RESULTS AT SECTOR LEVEL**



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	57%	82%	24%
Environmental	43%	84%	25%
Social	47%	80%	51%

<sup>\*</sup> Average score of all assessed companies in the sector

<sup>\*\*</sup> SAM Sector Mover



## Waste & Disposal Services

#### **DRIVING FORCES**

Waste & disposal services need to ensure the appropriate treatment for the many different types of waste. Facilitating the reuse and recycling of end-of-life products are the main challenges for the sector. As many countries still rely on landfills for their waste disposal, a priority for the sector is the introduction of alternative and innovative treatment processes to complement exhausted landfill capacities. Another challenge concerns the management of greenhouse gases from landfills: companies that use technologies to capture methane produced by decomposing waste and use it to generate energy will emerge as sector leaders. At the same time, the efficiency of transport equipment and logistics processes has a significant financial and environmental impact. Leading companies actively build a portfolio of real alternatives to landfills, and systematically tap the financial benefits of excellence in occupational health & safety. Active engagement with the sector's many stakeholders is an indispensable precondition for quick project approvals and the creation of a certain degree of confidence and transparency.

#### **HIGHLIGHTED CRITERIA**

#### ECONOMIC DIMENSION

- Codes of Conduct/ Compliance/ Corruption & Bribery
- Corporate Governance
- Customer Relationship Management
- Risk & Crisis Management

#### **ENVIRONMENTAL DIMENSION**

- Climate Strategy
- Landfilling & Alternatives
- Transportation

#### SOCIAL DIMENSION

- Human Capital Development
- Labor Practice Indicators
- Occupational Health & Safety
- Talent Attraction & Retention

### **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

Company Country

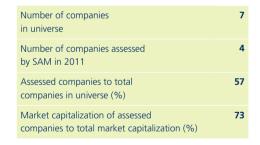
Nalco Holding Co. \*/\*\* United States

\* SAM Sector Leader

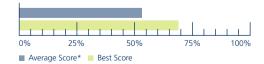
SAM Gold Class

\*\* SAM Sector Mover

### **SECTOR STATISTICS**



### RESULTS AT SECTOR LEVEL



Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	62%	72%	29%
Environmental	46%	73%	37%
Social	53%	63%	34%

<sup>\*</sup> Average score of all assessed companies in the sector



### Water

#### **DRIVING FORCES**

Water scarcity, deteriorating water quality, aging distribution and collection networks in developed markets, as well as increased consumption and rapid infrastructure expansion in emerging markets represent some of the key challenges for water utilities. Tightening regulations, political risks and adequate cost recovery are yet other concerns. Leading companies perform active resource management, reduce water losses in distribution, and foster demand-side efficiency. Best practices involve the application of innovative sewage and sludge treatment technologies in combination with biogas production. Leading companies also partner with technology providers to investigate treatment of emerging water pollutants such as endocrine disruptors. The liberalization trend increases competition and rewards integrated, cost-efficient and customer-oriented water management strategies. The recent recognition of access to water and sanitation as a human right underscores the importance of stakeholder engagement. As pricing strategies come under increased scrutiny, companies opt for increasingly innovative tariff structures.

#### HIGHLIGHTED CRITERIA

#### **ECONOMIC DIMENSION**

- Codes of Conduct/ Compliance/ Corruption & Bribery
- Corporate Governance
- Customer Relationship Management
- Water Operations

#### **ENVIRONMENTAL DIMENSION**

- Biodiversity
- Climate Strategy
- Environmental Reporting
- Environmental Policy/ Management System

#### SOCIAL DIMENSION

- Human Capital Development
- Occupational Health & Safety
- Stakeholder Engagement
- Talent Attraction & Retention

### **SUSTAINABILITY LEADERS 2012**

As of December 31, 2011

SAM Gold Class

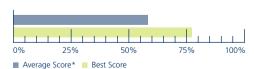
Company	Country
United Utilities Group plc *	United Kingdom
Sociedad General Aguas de Barcelona SA 1	Spain
Suez Environnement S.A. **	France

<sup>\*</sup> SAM Sector Leader

### **SECTOR STATISTICS**

Number of companies in universe	9
Number of companies assessed by SAM in 2011	8
Assessed companies to total companies in universe (%)	89
Market capitalization of assessed companies to total market capitalization (%)	95

### **RESULTS AT SECTOR LEVEL**

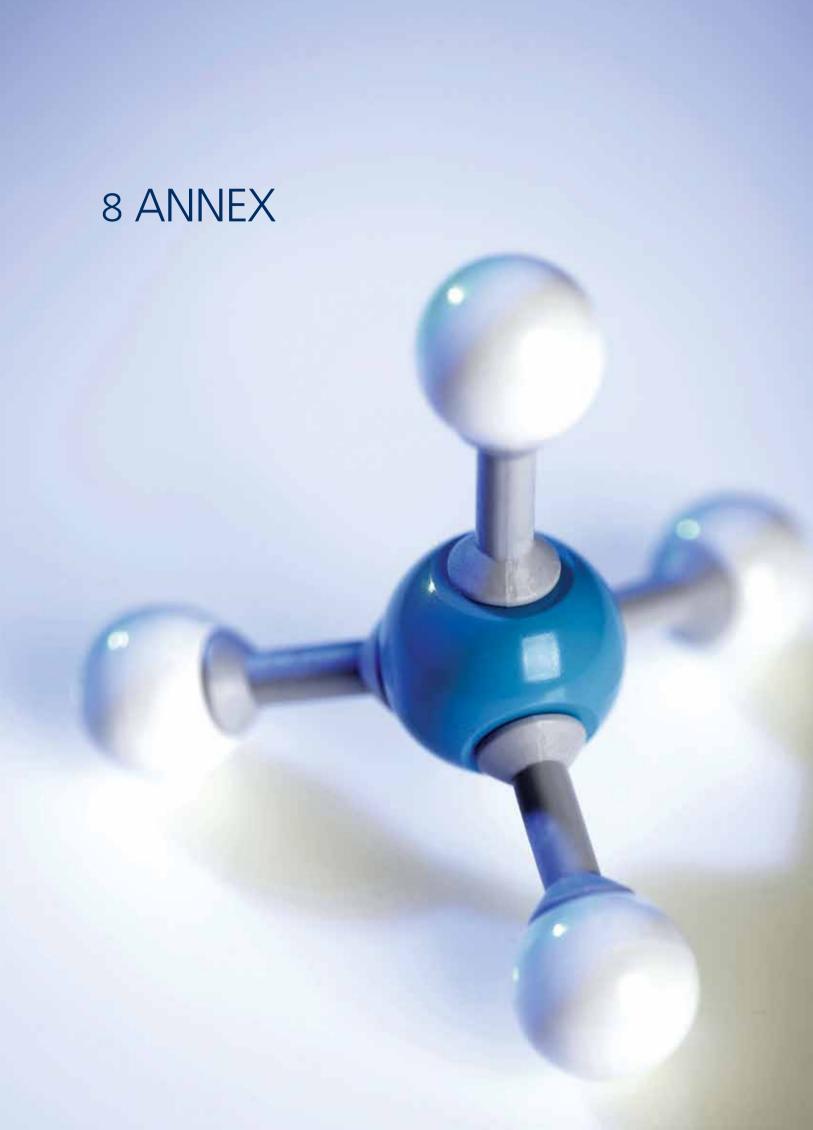


Dimension	Average Score *	Best Score	Weighting in Total Score
Economic	60%	79%	47%
Environmental	53%	80%	19%
Social	58%	85%	34%

<sup>\*</sup> Average score of all assessed companies in the sector

<sup>\*\*</sup> SAM Sector Leader

<sup>&</sup>lt;sup>1</sup> This company is not part of the largest 2,500 companies of the Dow Jones Global Stock Market Index and therefore not eliqible for SAM Sector Leader.



### 8. Annex

#### 8.1 SAM PROFILE

SAM is an investment boutique focused exclusively on Sustainability Investing. The firm's offering comprises asset management, indexes and private equity. Its asset management capabilities include a range of single-theme, multi-theme and core sustainability investment strategies catering to institutional asset owners and financial intermediaries in Europe, the United States, Asia-Pacific and the Middle East. Through its index activities, SAM has partnered with Dow Jones

Indexes for the publication and licensing of the globally recognized Dow Jones Sustainability Indexes (DJSI) as well as customized sustainability benchmarks. Furthermore, SAM acts as the center of expertise for Clean Growth Private Equity within Robeco. SAM is a member of Robeco, which was established in 1929 and offers a broad range of investment products and services worldwide. Robeco is a subsidiary of the Rabobank Group which has the highest credit rating of all privately owned banks, awarded by rating agencies Moody's, Standard & Poor's, Fitch and DBRS.

For additional information on SAM, please visit **www.sam-group.com** 

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Sustainability Operations

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Ida Karlsson

**Paulo Morais** 

Christopher Greenwald, PhD

Head of Sustainability Operations

academic institutions:

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 The University of Queensland

- School of Finance, Actuarial Studies and Applied Statistics, The Australian National University
- IESE Business School, University of Navarra
- School of Management,
   University of St. Andrews
- Harvard Business School
- University of Cambridge

### 8.2 SAM ACADEMIC ACTIVITIES

SAM has implemented a proactive approach to developing its research partnerships with academia. The purpose of its research collaborations is to confirm SAM's research leadership position in the Sustainability Finance industry, capitalize on the value of SAM's proprietary database and further develop its cutting edge methodology for integrating sustainability into the investment process. Within this framework, SAM focuses on extensive collaboration with and sponsorship of selected academic institutions. In all research initiatives, SAM assumes an active role in designing, leading and actively supervising the projects.

For more information, please e-mail us at qo-fmqblsustsvcs@kpma.com or visit our website. www.kpmg.com/sustainability

#### 8.3 KPMG PROFILE

As sustainability and climate change issues move to the top of corporate agendas, KPMG advises organizations to better understand the complex and evolving environment, helping them optimize their sustainability strategy.

KPMG's Climate Change and Sustainability Services professionals provide sustainability and climate change assurance, tax and advisory services to organizations to help them apply sustainability as a strategic lens to their business operations.

Our experienced teams assist organizations in the following areas:

- Sustainability risk & opportunity analysis
- Corporate responsibility strategy assistance
- Corporate social responsibility/sustainability/ GHG information systems design and implementation
- Regulatory framework assessment and optimization, including tax and carbon emission re-
- Tax incentives and credits
- Sustainable supply chain enhancements
- Corporate responsibility reporting and assurance, including pre-audit assessments and greenhouse gas emissions verification.

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# Company Overview

	SAM Sector Leader	SAM Sector Mover	SAM Gold Class	SAM Silver Class	SAM Bronze Class	
	SAM	SAM	SAM	SAM	SAM	Page
Company name						
3i Group plc						78
3M Company		•			•	73
ABB Ltd.						91
Abbott Laboratories				•		103
Abertis Infraestructuras S.A.					•	92
Acciona S.A.					•	88
Accor S.A.				•		90
ACS Actividades de Construccion y Servicios S.A.		•				88
Adecco S.A.						111
adidas AG	•		•			68
Aegon N.V.						93
Aeon Co. Ltd.						86
Agilent Technologies Inc.						77
AGL Energy Ltd.					•	76
Agnico-Eagle Mines Ltd.						97
Ahold N.V.						80
Air France-KLM	•		•			59
Air Products & Chemicals Inc.						67
Akzo Nobel N.V.			•			67
Alcatel-Lucent	•	•	•			69
Alcoa Inc.	•	•	•			60
Allergan Inc.						103
Allianz SE			•			93
Alstom S.A.					•	91
AMEC plc	•		•			100
Amgen Inc.		•				65
Amorepacific Corp.	•		•			102
AMP Ltd.						78
Anglo American Platinum Ltd.						97
Anglo American plc				•		97
AngloGold Ashanti Ltd.						97
ArcelorMittal				•		110
Asahi Glass Co. Ltd.		•			•	66

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	SAM Sector Leader	SAM Sector Mover	SAM Gold Class	SAM Silver Class	SAM Bronze Class	
	SAN	SAN	SAN	SAN	SAN	Page
Company name						
AstraZeneca plc		•	•			103
Atlantia S.p.A.				•		92
Atlas Copco AB					•	91
Au Optronics Corp.	•		•			70
Australia & New Zealand Banking Group Ltd.			•			63
Autodesk Inc.		•				108
Aviva plc					•	93
AXA S.A.					•	93
Ball Corp.					•	72
Banca Monte dei Paschi di Siena S.p.A.						63
Banco Bilbao Vizcaya Argentaria S.A.						63
Banco Bradesco S/A					•	63
Banco do Brasil S/A						63
Banco Espirito Santo S/A						63
Banco Santander S.A.						63
Bancolombia S.A.						63
Bank of Nova Scotia						63
Barclays plc					•	63
Barrick Gold Corp.					•	97
BASF SE				•		67
Baxter International Inc.	•		•			96
Bayer AG			•			67
Becton Dickinson & Co.						96
Benesse Holdings Inc.	•	•	•			109
BG Group plc						101
BHP Billiton Group					•	97
Biogen Idec Inc.					•	65
BMW AG	•		•			62
BNP Paribas S.A.						63
Bombardier Inc.		•	•			58
Bridgestone Corp.						61
British American Tobacco plc	•	•	•			112
British Land Co. Plc						105
British Sky Broadcasting Group plc						95

ASML Holding N.V.

	SAM Sector Leader	SAM Sector Mover	SAM Gold Class	SAM Silver Class	SAM Bronze Class	Page
Company name						
BT Group plc			•			79
CA Inc.						108
Campbell Soup Co.					•	81
Canadian Imperial Bank of Commerce						63
Canadian National Railway Co.						92
Capita Group plc		•			•	111
Capital Shopping Centres Group plc						105
CapitaLand Ltd.						105
Caterpillar Inc.						91
Cenovus Energy Inc.						101
CFS Retail Property Trust						105
CGG Veritas						100
China Mobile Ltd.						98
Christian Dior S.A.					•	68
Citigroup Inc.						63
City Developments Ltd.						105
Cliffs Natural Resources Inc.						110
Coca-Cola Hellenic Bottling Co. S.A.				•		64
Colgate-Palmolive Co.				•		102
Coloplast A/S						96
Commonwealth Bank of Australia						63
Commonwealth Property Office Fund						105
Companhia Energetica de Minas Gerais - CEMIG					•	76
Compass Group plc		•		•		90
ConAgra Foods Inc.		•			•	81
CORIO N.V.						105
Credit Agricole S.A.						63
Credit Suisse Group						63
CRH plc				•		66
Criteria CaixaCorp S.A.						78
Cummins Inc.						91
Daelim Industrial Co. Ltd.						88
Dai Nippon Printing Co. Ltd.						95
Daikin Industries Ltd.						91
Daimler AG		•	•			62
Daiwa Securities Group Inc.						78

	SAM Sector Leader	SAM Sector Mover	SAM Gold Class	SAM Silver Class	SAM Bronze Class	Page
Company name						
Danone S.A.			•			81
Danske Bank A/S		•				63
Dell Inc.						70
Delta Electronics Inc.		•	•			77
Denso Corp.						61
Deutsche Bank AG						63
Deutsche Boerse AG						78
Deutsche Lufthansa AG					•	59
Deutsche Post AG					•	92
Deutsche Telekom AG					•	98
Dexus Property Group						105
Diageo plc				•		64
DnB NOR ASA						63
Dongbu Insurance Co. Ltd.		•			•	93
Dow Chemical Co.				•		67
DSM N.V.	•		•			67
Duke Energy Corp.					•	76
E.I. du Pont de Nemours & Co.						67
E.ON AG					•	76
Eaton Corp.						73
Ecopetrol S.A.						101
EDP - Energias de Portugal S.A.	•		•			76
Electrolux AB	•	•	•			74
Elekta AB		•				96
Embraer S.A.	•		•			58
EMC Corp.		•				70
Enagas S.A.	•	•	•			85
Endesa S.A.					•	76
Enel S.p.A.					•	76
ENI S.p.A.					•	101
Eramet S.A.						97
Experian plc						111
Ferrovial S.A.						88
Fiat Industrial S.p.A.	•		•			91
Fiat S.p.A.			•			62
Fibria Celulose S.A.	•	•	•			82

	SAM Sector Leader	SAM Sector Mover	SAM Gold Class	SAM Silver Class	SAM Bronze Class	Page
Company name						
Finmeccanica S.p.A.			•			58
Firstgroup plc					•	113
Fomento de Construcciones y Contratas S.A.					•	88
Fortum Oyj						76
Fraport AG		•			•	92
Freeport-McMoRan Copper & Gold Inc.						97
Fresenius Medical Care AG & Co. KGaA						87
Fresnillo plc						97
Fuji Electric Co. Ltd.						75
FUJIFILM Holdings Corp.					•	70
Galp Energia, SGPS, S.A.		•				101
Gap Inc.						86
Gas Natural SDG S.A.				•		85
GDF Suez S.A.						76
Gecina						105
General Electric Co.						73
General Mills Inc.						81
GlaxoSmithKline plc					•	103
Gold Fields Ltd.				•		97
GPT Group			•			105
Grupo de Inversiones Suramericana S.A.						78
Grupo Nutresa S.A.					•	81
GS Engineering & Construction Corp.				•		88
H&R Block Inc.						109
H.J. Heinz Co.						81
Halliburton Co.						100
Hammerson plc					•	105
Heineken N.V.						64
Henkel AG & Co. KGaA	•	•	•			99
Hennes & Mauritz AB		•				86
Herman Miller Inc.	•	•	•			83
Hershey Co.						81
Hitachi Ltd.				•		77
Hochtief AG						88
Holcim Ltd.				•		66
Home Retail Group plc						86
Honam Petrochemical Corp.						67

	SAM Sector Leader	SAM Sector Mover	SAM Gold Class	SAM Silver Class	SAM Bronze Class	Page
Company name						
Hormel Foods Corp.						81
HSBC Holdings plc						63
HudBay Minerals Inc.						97
Humana Inc.						87
Hynix Semiconductor Inc.					•	107
Hysan Development Co. Ltd.						105
Hyundai Engineering & Construction Co., Ltd.	•		•			88
Hyundai Mobis Co. Ltd.		•			•	61
Hyundai Steel Co.						110
Iberdrola S.A.		•	•			76
Ibiden Co., Ltd.						75
IMI plc						91
Indra Sistemas S.A.				•		71
Industria de Diseno Textil S.A.				•		86
Infineon Technologies AG						107
ING Groep N.V.						93
Ingersoll-Rand plc						91
Insurance Australia Group Ltd.						93
Intel Corp.			•			107
IBM (International Business Machines Corp.)					•	71
International Game Technology						84
Intesa Sanpaolo S.p.A.						63
Intuit Inc.						108
Invensys plc			•			108
Investec Ltd.						78
Italcementi S.p.A.					•	66
Itau Unibanco Holding S.A.					•	63
Itausa-Investimentos Itau S/A	•		•			78
Itochu Corp.						111
ITV plc						95
J Sainsbury plc	•	•	•			80
JCDecaux S.A.						95
Johnson & Johnson						103
Johnson Controls Inc.				•		61
Kangwon Land Inc.						84
Kepco Plant Service & Engineering Co. Ltd.					•	111
Keppel Land Ltd.		•				105

	SAM Sector Leader	SAM Sector Mover	SAM Gold Class	SAM Silver Class	SAM Bronze Class	Page
Company name						
Kesko Oyj						80
Kingfisher plc						86
Kinross Gold Corp.		•				97
Klepierre S.A.						105
Komatsu Ltd.						91
Konica Minolta Holdings Inc.						94
KPN N.V.				•		79
Kraft Foods Inc.					•	81
KT Corp.	•	•	•			79
KT&G Corp.					•	112
Ladbrokes plc		•		•		84
Lafarge S.A.					•	66
Land Securities Group plc						105
Lanxess AG		•				67
Legal & General Group plc						93
LeGrand S.A.						75
Lend Lease Group						105
Lexmark International Inc.						70
LG Chem Ltd.						67
LG Electronics Inc.		•			•	94
LG Household & Health Care Ltd.		•		•		102
LG Innotek Co. Ltd.						75
Life Technologies Corp.				•		65
Linde AG						67
Lite-On Technology Corp.	•	•	•			75
Lloyds Banking Group PLC						63
Lonmin plc						97
Lotte Shopping Co. Ltd.	•		•			86
LVMH Moet Hennessy Louis Vuitton					•	68
Mahindra & Mahindra Ltd.						91
Man Group plc						78
MAN SE		•				91
Mapfre S.A.					•	93
Marks & Spencer Group plc						86
Marubeni Corp.	•		•			111
McDonald's Corp.					•	90

	SAM Sector Leader	SAM Sector Mover	SAM Gold Class	SAM Silver Class	SAM Bronze Class	Page
Company name						
McGraw-Hill Companies						95
MeadWestvaco Corp.			•			72
Medtronic Inc.						96
Merck & Co., Inc.					•	103
Metro AG						80
Metso Corp.						91
Michelin					•	61
Mitsubishi Corp.						111
Mitsui & Co. Ltd.					•	111
MOL Group						101
Molson Coors Brewing Co.		•			•	64
Morgan Stanley		•				78
Motorola Mobility Holdings Inc.					•	69
Motorola Solutions Inc.					•	69
MTR Corp. Ltd.					•	113
Münchener Rückversicherungs- Gesellschaft AG				•		93
Nalco Holding Co.	•	•	•			114
National Australia Bank Ltd.					•	63
NEC Corp.					•	70
Nedbank Group Ltd.						63
Neste Oil Oyj						101
Nestle S.A.				•		81
Newmont Mining Corp.			•			97
Nexen Inc.						101
Nike Inc.				•		68
Nippon Yusen K.K.						92
NKSJ Holdings Inc.				•		93
Nokia Corp.				•		69
Nomura Holdings Inc.						78
Nongshim Co. Ltd.						81
Northern Trust Corp.						78
Novartis AG			•			103
Novo Nordisk A/S			•			103
Novozymes A/S	•		•			65
NSK Ltd.						61
NYSE Euronext						78

	SAM Sector Leader	SAM Sector Mover	SAM Gold Class	SAM Silver Class	SAM Bronze Class	Page
Company name						
Office Depot Inc.						86
Outokumpu Oyj				•		110
Owens Corning				•		66
Panasonic Corp.			•			94
Pearson plc	•		•			95
PepsiCo Inc.	•		•			64
Petroleo Brasileiro S/A						101
Philips Electronics N.V.	•		•			94
Pirelli & C. S.p.A.	•		•			61
Portugal Telecom SGPS S/A				•		79
POSCO				•		110
PostNL	•		•			92
Potash Corp. of Saskatchewan Inc.						67
Praxair Inc.				•		67
Premier Farnell plc						111
Provident Financial plc						78
PTT PCL						101
Public Service Enterprise Group Inc.					•	76
Puma AG				•		68
Qantas Airways Ltd.		•		•		59
Quest Diagnostics Inc.						87
Rautaruukki Oyj	•	•	•			110
Red Electrica Corp. S.A.						76
Redecard S/A						78
Reed Elsevier N.V.					•	95
Rentokil Initial plc						111
Repsol YPF S.A.	•		•			101
Rhodia S.A.						67
Rio Tinto Group					•	97
Roche Holding AG	•		•			103
Rohm Co. Ltd.						107
Rolls-Royce Group plc			•			58
Royal Bank of Canada						63
Royal Bank of Scotland Group plc						63
RSA Insurance Group plc					•	93
RWE AG					•	76
Saipem S.p.A.						100

	SAM Sector Leader	SAM Sector Mover	SAM Gold Class	SAM Silver Class	SAM Bronze Class	Page
Company name						
Samsung Electro-Mechanics Co. Ltd.					•	75
Samsung Electronics Co. Ltd.	•	•	•			107
Samsung Heavy Industries Co. Ltd.						91
Samsung SDI Co. Ltd.	•		•			77
Samsung Securities Co. Ltd.					•	78
Sandvik AB						91
Sanofi S.A.					•	103
Santos Ltd.						101
SAP AG	•		•			108
Sara Lee Corp.						81
Sasol Ltd.					•	101
SBM Offshore N.V.						100
Schlumberger Ltd.						100
Schneider Electric S.A.						75
Schroders plc						78
SEGRO plc						105
Sekisui Chemical Co. Ltd.	•	•	•			89
SembCorp Industries Ltd.						100
Seven & I Holdings Co. Ltd.						86
Shaftesbury plc						105
Siam Cement Pcl	•		•			66
Siemens AG	•		•			73
SK C&C Co. Ltd.		•			•	71
SK Telecom Co., Ltd.	•	•	•			98
SKF AB						91
Smith & Nephew plc						96
Snam Rete Gas S.p.A.					•	85
Sociedad General Aguas de Barcelona SA <sup>1</sup>			•			115
Societe Generale S.A.						63
Sodexo S.A.	•		•			90
S-Oil Corp.					•	101
Sonoco Products Co.	•	•	•			72
Spectra Energy Corp.					•	85
Standard Chartered plc						63
Standard Life plc					•	93
Staples Inc.						86
State Street Corp.						78

<sup>&</sup>lt;sup>1</sup> This company is not part of the largest 2,500 companies of the Dow Jones Global Stock Market Index and therefore not eligible for SAM Sector Leader.

	SAM Sector Leader	SAM Sector Mover	SAM Gold Class	SAM Silver Class	SAM Bronze Class	Page
Company name						
Statoil ASA						101
Stockland	•		•			105
Stora Enso Oyj					•	82
Storebrand ASA				•		93
STX Engine Co. Ltd.						91
Suez Environnement S.A.		•	•			115
Sulzer AG						91
Sumitomo Forestry Co. Ltd.				•		89
Suncor Energy Inc.						101
Swiss Re	•		•			93
Symantec Corp.						108
Syngenta AG					•	67
TABCorp Holdings Ltd.	•		•			84
Taiwan Semiconductor Manufacturing Co. Ltd.					•	107
Target Corp.						86
Tata Consultancy Services Ltd.						71
Tata Steel Ltd.						110
TDK Corp.						75
Technip S.A.		•			•	100
Teck Resources Ltd.					•	97
Teijin Ltd.					•	67
Telecom Italia S.p.A.			•			79
Telefonica S.A.			•			79
Telenet Group Holding N.V.		•			•	95
Telenor ASA						98
Television Française 1 S.A.						95
TeliaSonera AB						98
Teradata Corp.	•		•			71
TERNA S.p.A.			•			76
Tesco plc						80
TNT Express N.V.			•			92
Tokio Marine Holdings Inc.				•		93
Toshiba Corp.					•	73
Total S.A.					•	101
Toto Ltd.						66
TransAlta Corp.						76
TransCanada Corp.	•	•	•			104

	SAM Sector Leader	SAM Sector Mover	SAM Gold Class	SAM Silver Class	SAM Bronze Class	Page
Company name						
Transurban Group					•	92
Trend Micro Inc.						108
TUI AG	•		•			113
TUI Travel plc		•		•		113
UBS AG						63
Umicore S.A.						67
Unibail-Rodamco S.A.						105
UniCredit S.p.A.						63
Unilever N.V.	•		•			81
United Microelectronics Corp.					•	107
United Parcel Service Inc.						92
United Technologies Corp.					•	58
United Utilities Group plc	•		•			115
UnitedHealth Group Inc.	•	•	•			87
Usinas Siderurgicas de Minas Gerais S/A						110
Verbund AG						76
Vestas Wind Systems A/S	•	•	•			106
Vodafone Group plc						98
Volkswagen AG			•			62
Volvo AB					•	91
Wal-Mart de Mexico S.A.B. de C.V.						86
Walt Disney Co.						95
Wesfarmers Ltd.						86
Westpac Banking Corp.	•		•			63
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