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Five secular sustainability trends
Sustainable and Responsible Investment

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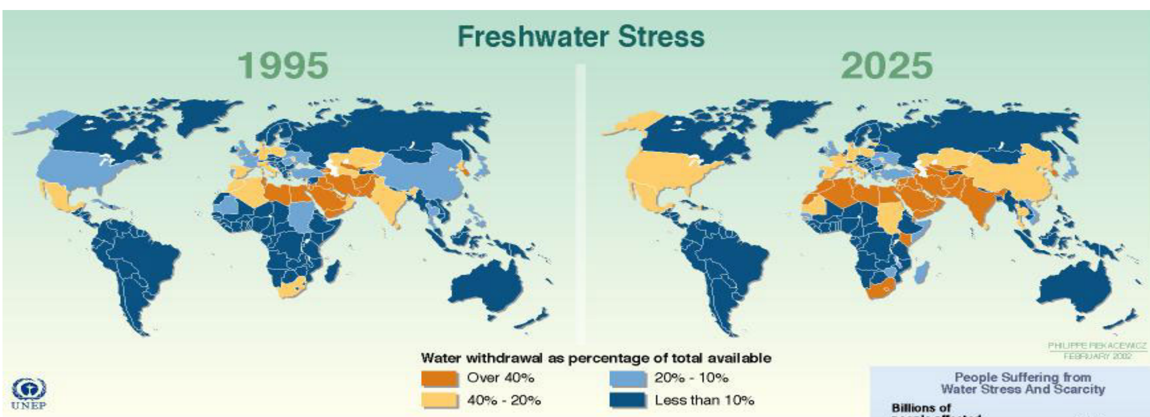
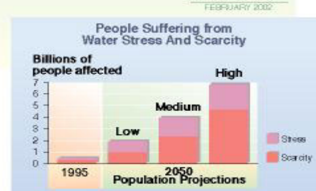
The world is changing at a stellar pace. These changes bring in their wake challenges involving the way we do business, and the means employed by companies to market their products and interact with their major stakeholders, including employees, customers and the environment. The same challenges will also open up new consumer markets and exciting new opportunities. Dexia Asset Management's proprietary sustainability team has identified five major sustainability challenges which will shape the economic, social and business environment in the years to come.

Trend No. 1: water scarcity

Despite the fact that about 70% of the earth's surface is covered by oceans, an increasing number of people are confronted with water scarcity. As emphasised by the World Health Organisation[1], water is an essential resource for life and good health. However, a lack of water to meet daily needs is a reality today for one in three people around the world. According to Unesco[2] estimates, the world has some 1,400 million cubic kilometres of water, 97.5% of which is salt water and only 2.5% fresh water suitable for human consumption. The problem is that more than two-thirds of that fresh water is encapsulated in polar ice caps and glaciers. The result? A paltry 0.26% of all the fresh water on earth, i.e., 900,000 cubic kilometres, is available for drinking, manufacturing, agriculture and personal use. The water issue is thus a phenomenon of global proportions as, as recently as 2002, more than 1.1 billion people lacked access to clean water. China, one of the fastest-growing countries in the world, has only 7% of the global fresh water reserves while the country has a population of more than 1.3 billion (22% of the global population). 80% of all the rivers in China are so polluted that all the fish have died. If present trends continue, by 2030, nearly half the world's inhabitants will, according to the UN[3], be living in areas of acute water shortage. In short, as the Financial Times says, "Water has never been under more threat in modern history".



Source: World Meteorological Organisation (WMO), Geneva, 1996; Global Environment Outlook 2000 (GEO), UNEP, Earthscan, London, 1999.



[1] World Health Organisation, 10 facts about water scarcity. http://www.who.int/features/factfiles/water/en/index.html
[2] http://www.unesco.org/water/
[3] http://www.reuters.com/article/latestCrisis/idUSN12399772

The drivers behind water scarcity are growing populations, industrialisation, consumption patterns and climate change. The world's population of 6.6 billion is forecast to rise by 2.5 billion by 2050, with most of the growth in developing countries, many in regions where water is already scarce. Further to that, in emerging markets such as India and China, vast amounts of useable water are being lost to industrialisation and an explosion in the use of water-polluting chemicals. In addition, technological applications, ranging from electricity production to semi-conductors and pharmaceuticals, are gobbling up ever-increasing amounts of 'blue gold'. The third reason – changing consumption patterns – might surprise. But consider this: every day, Europeans use up to 25 times the amount of water consumed by their developing-world counterparts. As people become wealthier, their dietary habits change, too, with an increased demand for proteins (meat). But one kilo of beef uses around 13,000 litres of water to grow the crops needed to feed the cattle … agriculture accounting for 70% of global water needs. Finally, climate change plays a role as well. Weather patterns become increasingly hard to predict, paving the way to disruptive events such as El Niño or the rising number of monsoons in Asia to the detriment of moderate rainfall.

From a business viewpoint, the water challenges provide enormous business opportunities for companies active in water purification and water management services (utilities). Builders of water infrastructure (sewages, pumps, valves) will stand to benefit, too. On the process side, water-intensive sectors such as Metals & Mining, Chemicals and Forest Products will need to adapt their business models, as will ultra-pure water consumers such as the Semiconductors sector. Companies that acknowledge water scarcity in their processes will have a competitive edge.

Trend No. 2: changing demographics in the emerging markets

The demographic concentration in the next few decades will lie, not in Europe or North America, but in Asia. The share of the European population is expected to diminish from 20% to 5% of the global population in the course of the next century. Asia will be the leader: India and China will have about the same population by 2030, causing *Chindia* to make up 35% of the world population. Population growth in Africa is expected to be explosive, with double the number of inhabitants compared to 1950. In 12 or so years' time, the Indian and Chinese economies combined will equate to 60% of the US economy[4]. In 2030, Africa is expected to make up 18% of the world's population. Other fast-growing populations are primarily concentrated in other Asian countries: Vietnam, Korea, Indonesia, Pakistan, etc. Apart from growing and developing nations, two drivers we have just discussed, there is a third powerful driver: urbanisation. According to figures published by the UN and CLSA Asia Pacific[5], Asia Pacific ex Japan in 1970 had an urbanisation rate of 20%. By 2000, this had risen to 34%. By 2015 and 2030 the urbanisation rate is expected to climb to 43 and 52% respectively. The urbanisation rate in Latin America, another region that is urbanising at a hectic pace, is also quite telling: in 2000, 75% of the population was already living in cities. This figure is projected to go up to 81 and 84% by 2015 and 2030 respectively. This generally means higher incomes, greater educational opportunities and more discretionary spending. Also, it will impact dietary patterns, social cohesion, the further emergence of a service economy, and a rise in energy demand.

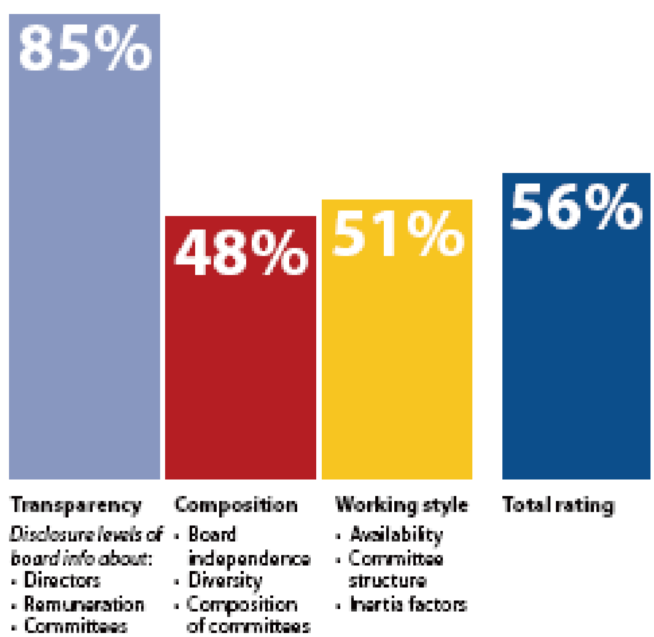
From a business viewpoint, the changing demographic patterns are expected to have various consequences. For instance, with regard to production centres, the proximity to customers (of, for example, the cement industry) will be important. Also, low-cost production leads to innovation and re-location strategies. Of course, this will require companies to properly manage their social and environmental challenges. Another consequence will be a change in consumer base and profile: new market opportunities will emerge, e.g., microfinance and existing products will be 'tweaked' to satisfy the demands of new consumers. One example would be the very low-cost entry-level cell phone handsets offered by Motorola and Nokia; another, household products. For instance, Procter & Gamble offers products that are adapted to the needs and living conditions of people in emerging markets. P&G even has laboratories that attempt to recreate the humidity and temperatures in countries such as China and Mexico, and its researchers spend time in people's homes to understand how they actually live[6]. Finally, due to rapid urbanisation, major infrastructure investments in developing economies will be needed.

[4] Why invest in Asia? A dozen good reasons. CLSA Asia Pacific Markets: 2009.
[5] Ibidem
[6] Laboratories of Innovation: Leveraging Emerging Markets for Commercial Success.
http://www.deloitte.com/dtt/cda/doc/content/Innovation%20in%20Emerging%20Markets_ExecutiveSummary_Final_2006(4).pdf

Trend No. 3: more attention to corporate governance

The financial crisis we currently find ourselves in can, to a large extent, be attributed to failures and weaknesses in corporate governance arrangements. In many cases, in both financial and non-financial companies, board remuneration, by rewarding excessive risk-taking, was not tied to long-term performance and consequently not aligned with the interests of long-term investors and other stakeholders. Other cases of less-than-ideal corporate governance that have been reported include misaligned risk management and potential weaknesses in board composition and quality. In addition to the financial crisis, growing public and regulatory pressure (e.g., *Code Lippens* for publicly listed companies in Belgium, *Code Tabaksblat* in the Netherlands) has put sound corporate governance in the spotlight. The goals of sound and robust corporate governance spanning board remuneration and composition, compliance with accounting standards and thorough risk management are clear: the safeguarding and enhancement of the long-term value of companies, and higher standards of accountability and transparency. Investors being able to vote at general meetings and asset managers taking on their responsibility by engaging in proxy voting on behalf of their clients are of key importance. Dexia Asset Management (Dexia AM) puts great emphasis on the corporate governance adopted by the companies in which it invests on behalf of its customers. In 2008, Dexia AM participated in over 100 general meetings for its open-ended funds and voted on more than 1,100 resolutions. Contentious issues revolved around three broad themes: board accountability and independence, remuneration, and share capital issues.

With regard to the business challenges, all sectors are clearly impacted by the justifiable demand of long-term investors for better corporate governance. It is in their own interest: it enables optimal company strategic decisions and will ease access to capital on the markets.



Source: Heidrick and Struggels, 2009 report

Trend No. 4: climate change

The scientific evidence is now overwhelming: climate change, which presents very serious global risks, demands an urgent global response. The IPCC (Intergovernmental Panel on Climate Change) has stated that "*CO_2 emissions need to be cut by at least 50% (80% for developed countries) from their 1990 levels by 2020 to prevent more than 2°C of warming*." The economic consequences of climate change are clear: floods, storms, heat waves, drought and natural disasters. Insurance firms have already raised premiums for many insurance policies. The *Stern Review on the Economics of Climate Change*[7], a 700-page report discussing the effect of global warming on the world economy, has calculated that, without any correction, climate change may reduce global GDP by up to 5% – the equivalent of a global depression! The renowned environmental pundit, Geoffrey Heal, has stated that the cost of limiting global warming to 2°C will amount to about 3% of global GDP. The time to act and decarbonise the global economy is here and now. Apart from scientific evidence, the regulatory framework in many countries (the *American Energy and Security Act*[8], for one) is becoming stricter in order to mitigate climate change. Other drivers are the higher long-term fossil fuel prices and the emergence of competitive alternative energy technologies. Climate change obviously has business implications. Energy providers need to rethink the relative attractiveness of their product mix (coal, oil, gas, alternative energy). Energy users such as real estate, transport and energy-intensive manufacturing sectors will need to mitigate their energy use and make it less CO_2-intensive by introducing a carbon-neutral energy policy. 70% of all CO_2 emissions in the industrial sector come from three sectors: steel, cement and chemistry. Regional accents are also important: European and Japanese production techniques are the cleanest, whereas India and China produce in a much more polluting way. Even the best production processes leave room for a reduction of 10 to 40%[9]. Energy efficiency enablers such as measurement tools and insulation products will become more important and expand their client base as consumer awareness, possibly underpinned by government stimulus, rises. Finally, sectors such as agriculture will also need to adapt to this new reality. For the record: agriculture and forestry account for one-third of CO_2 emissions through deforestation, the combustion of woods and fields and other agricultural procedures[10]. The sector is thus a 'hidden' emitter with an equally high responsibility.

[7] http://www.hm-treasury.gov.uk/sternreview_index.htm
[8] http://en.wikipedia.org/wiki/American_Clean_Energy_and_Security_Act
[9] Econoshock: hoe zes economische schokken uw leven fundamenteel zullen veranderen. Houtekiet/Geert Noels: 2008.
[10] Ibidem.

Trend No. 5: shortage of human capital in an ever more complex and global economy

Despite the economic crisis, which is has seen many jobs shed around the globe, in the long run there remains a lack of skilled workers in many sectors of the economy. For instance, the retirement of many experienced, generously paid professionals in the oil & gas sector has become a trend. Replacing such experience in key roles is difficult. The average age of oil industry workers in OECD countries is climbing steadily (the median age of nearly half the professionals in today's oil industry is 47, among the oldest of any industry). And there just aren't enough young professionals to replace them. According to a 2004 survey conducted by the American Petroleum Institute (API), by 2009, there will be a 38% shortage of engineers and geoscientists and a 28% shortage of instrumentation and electrical workers[11]. Another driver is that loyalty to one specific organisation is not self-evident anymore, e.g., job turnover is rising. The globalisation of the economy is another driver, increasing the mobility of workers between countries and even continents. Furthermore, the workforce is ageing at a very rapid pace. By 2050, more than one-third of the European population will be over 60! This will face companies with many challenges. The struggle for competent professionals will grow more intense. This means that companies will need to look over the borders to find these people, pushing up wages and benefits. Attention to intercultural sensibilities will need to rise concomitantly. Finally, companies and workers will need to deal with restructurings, relocations and increased offshoring.

From a business point of view, these topics will clearly impact human resources departments, as well as client relation management. Moreover, we see a concrete business opportunity for cross-border training-related services (language skills, intercultural sensitivity and other 'soft' skills training).

Proportions of working-age people by age group; UK; 1975 to 2025