Why Businesses Should Environmental Initiatives

Businesses have started to recognize that climate change poses both risks and opportunities, with strategic and financial implications

The world is currently facing one of its most serious challenges, with consequences that go far beyond its effect on the environment: **climate change**. Today there is a scientific consensus that human activity is beyond reasonable doubt a significant factor behind the current rapid changes in the world's climate. The production of energy using fossil fuels, and consequently the mass emission of greenhouse gases (GHG), is pushing the earth's temperature to dangerous figures. Renewable energies could be the long-term answer for this challenge, using various sources of alternative energy such as tidal waves, and solar, wind and bio-mass technologies. However, these solutions will only become efficient enough to significantly replace fossil fuels several decades into the future.

Today society is committed to working fast to amend this problem and prevent a global environmental disaster. Businesses have started to recognize that climate change poses both risks and opportunities, with strategic and financial implications.

Environmental challenges in recent years have increased the trend of "going green" in businesses like never before. There are two main factors that are currently pushing toward environmental-friendly business behaviors: harsher international and local regulations and the high fluctuations of fossil-fuel prices.

In the category of international regulations, one major step in the fight against climate change is the Kyoto Protocol. This agreement is linked to the United Nations Framework Convention on Climate Change. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European Community for reducing greenhouse gases emissions. The business approach reflected in the protocol provides incentives through carbon trading (e.g. a company or a country finding it expensive to achieve an emission reduction can alternatively buy credits, so that the money can be used anywhere else on projects where an equivalent reduction of emissions could be achieved at lower cost). Although this protocol has not been signed by some major industrialized countries (including the

Commit to

By Guy Prooper, Calin Tudor Buzan and Chiara Garavaglia

United States), over time, both international and local regulations are increasing environmental protection all over the world.
Fossil-fuel prices are impacting both the economy and the environment. In recent years, the price of crude oil, and therefore the price of various oil products, has been dramatically unstable. The factors behind this instability are both commercial and political. Although the instability of oil prices is sometimes translated into dramatic drops (like the recent fall of more than 50 percent), the general trend is upward. Taking global industrialization into consideration, that means a constantly increasing demand for energy; since fossil fuel is a limited natural resource, we can expect continued instability in oil prices, with eventual increases to record-breaking figures.
In organizations all around the world "green behavior" can come in many forms. While some environmental initiatives could have a direct positive impact on a company's business performance, other initiatives might not offer immediate reciprocation. Although some environmental projects might not return the investment in the short run, they might result in a long-term financial contribution or in other benefits.

Why should businesses commit to environmental initiatives?

We believe that the answer to this question can be divided into three main categories:

- Must-have initiatives
- ROI-driven initiatives
- Human-values-related initiatives

To examine the development of environmental initiatives, we have chosen Romania as a case study. Romania has gone through two major transitions in the last two decades: the termination of the Communist regime and its entry into the European Union. Both processes have rapidly shifted its awareness to environmental protection and related legislation, thus imitating in a very short period of time processes that have taken half a century

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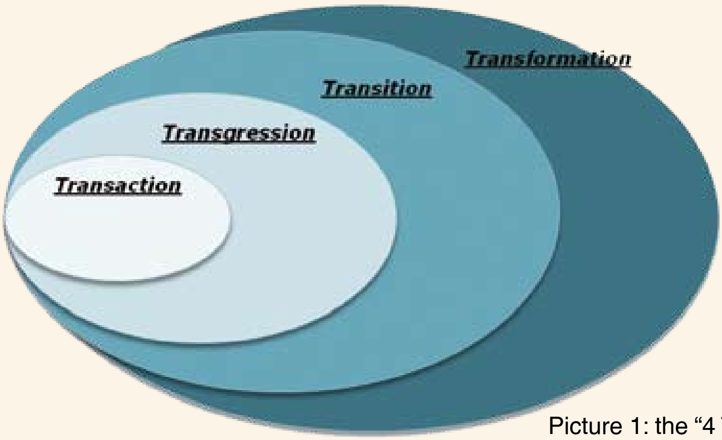
Paul Nuber,
General Manager,
Nestle Romania

Markus Wirth,
General Manager,
Holcim Romania

HSE - health, safety and environmental

No matter which industry or sector a company belongs to, it will feel the effects of climate change. Even people skeptical about the dangers of global warming recognize that the phenomenon has wide-ranging implications. Many businesses must contend with higher costs of raw materials and energy as governments enact policies that place a cost on emissions. In addition, consumers increasingly are taking into account a company's environmental record when making purchasing decisions.
Companies need to manage and mitigate their exposure to the risks associated with climate change, including lack of raw materials, water and energy. At the same time, they must seek new opportunities for profit and generate a competitive advantage over rivals in a carbon-constrained future.
Usually the health, safety and environmental (HSE) needs of a company are linked to the challenges and risks it faces in a particular phase of its life cycle (see picture1).



Picture 1: the "4 Ts" model

Transaction is the need to evaluate HSE liabilities during an M&A operation aimed at quantifying the potential risk and considering it in the purchase price.
Transgression is the need to be compliant with HSE rules and laws to avoid wrongdoing.
Transaction and transgression are the companies' most common and basic HSE needs that are satisfied by adopting codified behaviors and rules. We define an initiative linked to regulatory issues (policies such as new emissions standards) as being a "must-have initiative"; companies usually consider it a pure cost.
As HSE issues increasingly become a matter of business rather than of compliance, top managers are starting to consider the impact and risk of HSE problems in evaluating alternative strategies and business scenarios.
Transition is the need to assess business strategies according to HSE issues in a changeover period (e.g. passage from an industrial stage to a different stage). This need is strictly linked to the existence of a business case.
Risk assessment is the first step in identifying possible business scenarios and design sustainable business models, both economically and environmentally. ROI-driven initiatives lower CO_2 emissions, waste, energy and water usage, while producing economic savings.
Transformation is the need to create and implement a new sustainable business system.
Creating a sustainable business system means redesigning the ecological, social and economic profile of an entire business system, using a holistic approach that involves different aspects of the business and considers the social impact of sustainability.
Human-value-related initiatives aim to introduce a business model based on social-responsibility principles. Even if the concept seems counterintuitive, human-value-related initiatives could be a business opportunity.

in more-developed countries. With a population of almost 22 million, Romania joined the EU in January 2007. The country is still one of the poorest in central and eastern Europe, but since 2000 has enjoyed a very high rate of economic development.

The recent economic history began in 1989 with the demise of communism in eastern Europe, with a largely obsolete industrial base.

Environmental protection was not a great concern during the era of communism, and some of this industrial inheritance survived until 2007. Another interesting aspect is that between the years 1989-2000, pollution levels were reduced along with the decrease of industrial production due to inefficient productivity, thus producing less greenhouse gases. Due to years of permissive environmental regulations, and the strict European Union regulations imposed when Romania joined the EU, Romania was granted a transition period to comply with EU rules in specific areas concerning air quality, waste management, water quality and industrial pollution. This transition period was primarily justified by the substantial investment needed in infrastructure and technology to comply with EU legislation.

Must-have initiatives

Current environmental issues faced by Romania are air and water pollution due to industrial effluents, soil erosion and the degradation and contamination of the Danube delta wetlands. According to Romanian authorities, the costs of complying with EU environmental laws have been estimated at approximately €27 billion until the end of the transition period. These regulations will affect both the private and the public sectors.

The private sector has received a significantly shorter transition period than the public sector to comply with EU legislation; it also has not received support from EU funds.

The industry's immediate effort, from the end of negotiations in April 2006 until entry to the EU in January 2007, was evaluated at €2.8 billion.

Meeting EU environmental regulations was a bigger challenge for local and smaller companies. While these companies faced an even greater gap between past standards and the required performance according to EU legislation, allocating the capital required to close this gap was significantly harder. In many cases, multinational giants operating in Romania had an easier task facing new environmental standards. These companies were usually more prepared and, when needed, could more easily come up with the necessary investments.

One such multinational company is Holcim, a Swiss-based international cement manufacturer.

"On the environmental perspective, joining the EU did not have any effect on our

consumers increasingly are taking into account a company's environmental record when making purchasing decisions

According to Romanian authorities, the costs of complying with EU environmental laws have been estimated at approximately €27 billion until the end of the transition period company, as Holcim emission standards are established internally and go far beyond respecting EU regulation," said Markus Wirth, general manager of Holcim Romania. Between 1997 and 2007, Holcim Romania invested more than €26 million in environmental protection.

Another example of a global group operating in Romania is Nestle.

"I believe that no country has regulations as strict as Nestle's regarding consumption of electrical energy, gas fuel and water," said Paul Nuber, general manager of Nestle Romania. "When Nestle entered Romania, we applied our internal regulations for the protection of the environment and therefore did not have any difficulties complying with new regulations when Romania joined the EU."

We believe that the need to comply with tough environmental regulations will contribute to businesses' aggregation process as more small local companies find it impossible to jump over this hurdle.

ROI-driven initiatives

When it comes to environmental ROI (return on investment) initiatives, they are usually related to the reduction of energy consumption. The growing cost of energy affects all industries, but especially businesses such as automotive producers, electronics, tourism and construction.

The increase in the cost of energy is encouraging investment in manufacturing technologies, shortening the return on investment for those projects. An example of such a project is the replacement of Holcim's old kilns with modern equipment and the production of electric energy in thermal power plants. Aside from the benefits of improved manufacturing capabilities and reduction of production costs, the project has also resulted in decreased greenhouse gas (carbon dioxide) emissions. Between 2004 and 2007, the total reduction of emission was quantified at 500,000 tons of CO_2.

There are also many different supply-chain investments that could help a business reduce its energy costs and thus provide a tangible return on investment. "Nestle has a hard policy on consumption of energy in distribution," Nuber said. "We manage this issue strictly and constantly audit our suppliers."

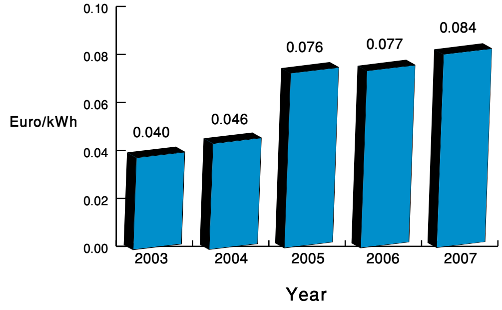
He cited the rapid changes taking place in Romania, adding, "The quality of local trucks is improving, and trucks today pollute much less than four years ago."

Increased energy costs also encourage the decentralization of production sites. As transportation costs grow, more and more companies prefer to position their pro-

Largest investments required in private sector for adhering to EU environmental legislation (Capital business magazine, November 2005)

Industry	Total investments – million euros
Refinery and gas sectors	440
Steel industry	458.7
Chemical industry	559.6
Mining industry	180
Pig and chicken farms	112

The evolution of the price of electricity in Romania based on Eurostat (European Bureau of Statistics)



duction sites closer to their customers, willing to pay the price of lower manufacturing efficiency.

Human values

Businesses today have a greater responsibility as their impact on society becomes more significant, and they do not always invest for the sake of foreseen business benefits. CEOs could point out that profits are not an end in themselves, but rather a signal from society that a company is providing things people want.
By building social issues into strategy, big companies can recast the debate about their role in society. We can find many examples of the long-term business impact of social issues.
For example, in the pharmaceutical sector, the past decade's storm of social pressures stemming from issues such as public perceptions of excessive prices charged for HIV/AIDS drugs in developing countries has resulted in a general (and sometimes seemingly indiscriminate) toughening of the regulatory environment. In the food and restaurant sectors, the long-escalating debate about obesity is now resulting in calls for further control on marketing of unhealthy foods. In the case of big financial institutions, concerns about conflicts of interest and misrepresentation of products have recently led to changes in core business practices and industrial structure. For some big retailers, public resistance to new stores is constraining growth opportunities.
And all this is to say nothing of the way social and political pressures have reshaped and redefined the tobacco, oil and mining industries, among others, over the decades. Just as important, these outcomes have not just posed risks to companies, they have also generated opportunities for value creation: in the pharmaceutical sector, for example, the growing market for generic drugs; in the case of fast-food restaurants, providing healthier meals; and in the case of the energy industry, meeting fast-growing demand (as well as regulatory pressure) for cleaner fuels such as natural gas.
Social pressures often indicate the existence of unmet social needs or consumer preferences. Businesses can gain advantages by spotting and supplying these before their competitors do.
As people in Romania become more aware of the need for environment protection, more businesses operate various environmental initiatives as part of their CSR (Corporate Social Responsibility) policy.
Holcim recognizes its social responsibilities and runs various programs for the benefit of the communities around its facilities. One successful Holcim story is a pilot project in 21 cities around Romania that started four years ago. The project consisted of giving to children from the 7th to 11th grades books with subjects

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By building social issues into strategy, big companies can recast the debate about their role in society

Case study: The review of waste management in process manufacturing

A fast-growing company in the oil and energy sector (oil-refining and downstream) was experiencing an increase of 50 percent in waste-management costs over the last two years, which resulted in a deviation from the budget of almost 100%. The company was interested in determining the cost of waste management and optimizing effectiveness, while being in compliance to trim down costs. Tefen was brought in to identify and implement opportunities for optimization at every stage of the process.

A process-mapping exercise of the whole waste-management process enabled the quantification of full waste-management costs (from generation to disposal) and the identification of a wide array of improvement opportunities. Through database building/analysis and interviews with the involved functions (ENV, PROC, OPS) a full analysis of cost was created. A dedicated team composed of company employees and Tefen's consultants identified 21 quick-hit opportunities out of the analysis, from which seven have been considered for immediate implementation, and the related preparatory activities have been carried out. Another team carried out scouting visits, with the aim of further investigating the industry's best practices. As a result, new waste-management model guidelines were developed.

The project's benefits were significant and immediate. In the short term, packaging and collection modes were optimized and remarkable waste volumes were managed "ad hoc." For the mid term, packaging and disposal-service procurement was optimized and innovative tank-cleaning technologies were implemented. For the long term, waste-processing plants for the downgrade of delivered waste were introduced, along with the development of a global-service approach in waste management.

The economic benefits of the improvements and the implementation of the new model for waste management enabled savings in excess of €6 million per year, equal to about 30% of the total As-Is.

related to the protection of the environment. The program was financed by Holcim for two years, after which the Ministry of Education introduced this program in all the schools in Romania.

"If you want to educate the citizens of a country about the importance of the environment and how to protect it, you should start with the younger generation," Holcim's Wirth said, citing a similar level of environmental awareness in Switzerland decades ago, when school programs were able to enhance public awareness through children.

One key element of Nestle's green policy is water consumption.

"The consumption of water is strictly controlled," Nestle's Nuber said. "The water is purified and there is a policy of minimizing consumption, even if local authorities do not impose it. There is a strong pressure to reduce consumption each year."

"Nestle has more than 260,000 employees," he said. "Add to that their families and our suppliers that have to meet our standards, and you can clearly see that our impact on society today is more significant than ever."

In conclusion, human-value-related environmental initiatives do not necessarily result in increased profits, but we can estimate that as the environmental-friendly trend grows in the future, companies committed to these initiatives will be leaders, and their businesses will profit either by better reputations or their compatibility to future and even stricter regulations.

Regarding those initiatives, Nuber said, "Being ahead in everything also includes being ahead in environmental protection. Only by acting in this way are you capable of creating long-term competitive advantages for your company."

Nevertheless, we can add that the impact of these initiatives on company values can also prove beneficial today, as employees have a stronger bond and admiration for their company values.

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