

# Business Going Green

An exploratory study on the process towards sustainability



Foto: Ed Meyers

Daniel Arenas | Jérémie Fosse | Emily Huc

### Institute for Social Innovation

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# ESADE

Ramon Llull University

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SOCIAL INNOVATION

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# Prologue

As we write these words, an oil spill in the Gulf of Mexico, which has been spewing oil into the sea for several months, has turned into one of the worst environmental disasters in world history. On a similar note, the human and legal consequences of the Bhopal chemical disaster continue to fill newspapers columns. And a few months ago in Copenhagen, political representatives from around the world found it difficult to reach binding agreements on greenhouse gas emissions.

However, and in spite of everything, some companies and managers are beginning to see the need to incorporate the environment into their business development strategy, along with the opportunities to put this into effect. Some of these 'green' companies, which have often undergone a genuine internal transformation, are currently leaders in their sector of activity and key social actors on the path towards sustainability.

After a year of field research and academic analysis, we are pleased to present this study. It analyses the main key factors for transforming traditional twentieth century businesses, with a business model focused on economic competitiveness, into innovative twenty-first century companies: based on a sustainability strategy that creates value not only for shareholders but also for society and the planet as a whole.

The study begins with a presentation of the conceptual framework for the process of organisational change towards sustainability, and presents four cases of successful green companies from various sectors and countries. This research is not intended to be exhaustive. Many other examples and valuable theories, which would have provided additional ideas, could probably have been included. However, in drawing up this study we have attempted to highlight the main patterns and models that may serve to inspire other companies to move towards a paradigm shift.

Hopefully, this study will encourage the business, social, political and academic worlds to further explore and make progress in this field in order to fulfil the challenge of creating a more just and sustainable society.

Daniel Arenas,  
Research Director and Professor at ESADE's Institute for Social Innovation;

Jérémie Fosse,  
founding member of eco-union and Strategic Consultant;

Emily Huc,  
eco-union collaborator and Change Management Consultant.



# 1. Introduction

Our society is currently facing an unprecedented series of crises in modern history—financial, economic, industrial and environmental crises—as a consequence of an unsustainable development model based on the mismanagement of social and natural resources. The more complex and dangerous threat is probably climate change. The temperature on planet Earth is rising. Fossil fuel combustion, irresponsible land use and extensive deforestation are all contributing to an increase in the level of greenhouse gas emissions, the main cause of global warming. If no significant steps are taken to reverse this phenomenon, the rise in temperature could lead to massive ecological disasters, social unrest, and the inability of most societies to maintain their current economic activities.

However, crises often generate a number of opportunities. Companies with vision and leadership have the opportunity to change their business models and work towards a more sustainable future based on energy and resource efficiency, the development of eco-innovations and the empowerment of people. The businesses engaging in the “green economy” will obtain a key competitive advantage and will be recognised as leaders within their sector. In this theoretic and empirical study, we examine companies that have already succeeded in this area, inspiring others to follow their example.

## A global economy threatened by environmental crises

### Environmental issues at a glance<sup>1</sup>

	Environmental Issues	Business consequences
Climate change	<p><b>Temperature rise:</b> In Europe, the hottest ever recorded 8 years have occurred after 1998.</p> <p><b>Sea level rise because of ice melting:</b> In recent years, Mount Kilimanjaro has lost 80% of its ice.</p> <p><b>Disrupted ecosystems:</b> Changes in rainfall patterns, sea level and temperatures will dramatically affect indigenous species with major consequences on food production and land use.</p> <p><b>Displaced populations:</b> Some regions and countries such as Bangladesh will be particularly affected by the rising sea level, strong winds and increase in temperature. “Hundreds of millions of people could suffer hunger, water shortages and coastal flooding.” (Stern Review<sup>2</sup>)</p>	<p>70% of climate change is caused by the emission of carbon dioxide, CO<sub>2</sub>, which is produced primarily by burning fossil fuel. The Stern Review warns that “stabilization requires that annual emissions be brought down to more than 80% below current levels. The depth and the scale of the change needed to reach such a low level of emissions imply that strict regulations will have to be imposed globally, involving deep changes in business activities”. Today, some businesses such as insurance companies have already begun to suffer a direct impact.</p> <p>The consequences can be such that “ignoring climate change will eventually damage economic growth.”</p>
Energy	<p><b>End of energy as we know it:</b> Fossil fuel causes air and water pollution and participates in increasing carbon dioxide emissions. Natural resources and oil, in particular, are scarce. The combination of these two factors will inevitably lead to a drastic transformation of humanity's energy use.</p>	<p>“The power sector around the world would need to be at least 60% decarbonised by 2050 for atmospheric concentrations to stabilise” (Stern Review). At the same time, the demand for energy continues to rise globally, especially in developing countries. As such, there will be increasingly high competitive pressures on energy use, and energy prices will rise.</p> <p>The energy crisis can also be seen as an opportunity to invest in alternative energy sources: Solar, wind, and hydrogen.</p>

(Continues)

<sup>1</sup> Esty D., Winston A., (2006): *Green to Gold, How smart companies use environmental strategy to innovate, create value, and build competitive advantage*, New Jersey: Yale University Press.

<sup>2</sup> Stern N. (2006), *The Stern Review: Report on the Economics of Climate Change*, [http://www.hm-treasury.gov.uk/stern\\_review\\_report.htm](http://www.hm-treasury.gov.uk/stern_review_report.htm) (accessed August 2009).

Environmental issues at a glance<sup>1</sup>

	Environmental Issues	Business consequences
Waste	<b>Scale:</b> According to Michael Braungart and William McDonough, both founders of the “Cradle to Cradle” concept, “more than 90% of materials extracted to make goods become waste almost immediately in the US.” <sup>3</sup> <b>Disposal:</b> On a finite planet, waste disposal is a major concern, especially for chemical and toxic waste.	The cost of producing waste is likely to increase exponentially. However, it also represents a major opportunity for businesses to re-think their production models to reduce the material used and reuse what is currently perceived as waste.
Water	<b>Scarcity:</b> According to the UN Millennium development goals, in 2008, 1 billion people still lacked access to safe drinking water. As the population continues to grow, pressures for clean water will increase, especially in dry regions. The UN Environment Agency (UNEP) warns that 3 billion people will face water shortages within 50 years.	Water practices will be increasingly scrutinised. In Kerala (India), the local government imposed the closure of a Coca-Cola plant because its water consumption was increasing water strains among the local population. <sup>4</sup>
Land use and Biodiversity	<b>Deforestation:</b> Forests play a central role in regulating CO2 levels in the atmosphere. However, deforestation continues to increase and accounts for 25% of greenhouse gas emissions (Financial Times – December 2, 2008). <b>Agriculture:</b> More than half of the world’s farmable land suffers from major degradation and is threatened to become unproductive (UNEP in Le Monde Diplomatique – Atlas 2006).	Land use, particularly linked to forest management, will become more controlled. Wood or paper packaging will continue to be the target of NGO scrutiny and campaigns. Companies whose products are primarily agricultural might be affected by soil quality and the loss of biodiversity. Finally, wherever they are located, plants and factories will have to look more closely at the impact of their activities on local biodiversity.
Pollution	<b>Air:</b> The European Commission estimates that air pollution causes 300,000 deaths annually in Europe. <b>Chemicals:</b> Little is known about the long-term effects of the toxic elements used.	Control over air emissions is likely to increase as well as scientific interest in understanding how toxic chemicals affect human health.

In this context of complex, interrelated environmental crises and challenges, businesses will not be able to ignore environmental sustainability for very long. The Stern Review estimates that “if we don’t act, the overall costs and risks of climate change will be equivalent to losing at least 5% of global GDP each year, now and forever.” The Review argues that, if wider risks and impacts are considered, the damage might be significantly higher and reach 20% or more of GDP. However, if action and preventive measures are taken now, the cost can be limited to about 1% of global GDP annually.

<sup>3</sup> Braungart, M.; McDonough, W. (2003). *Cradle to Cradle, remaking the way we make things*. North Point Press.  
<sup>4</sup> Esty, D.; Winston, A. (2006).

Transforming risks into opportunities to create a different business model

Some companies with vision and leadership see the environmental crisis as an opportunity to change their business models and work towards a more sustainable future based on energy and resource efficiency, the development of eco-innovations and the empowerment of people. A well-known example is that of Interface, summarized below.

### Finding eco-advantages at Interface

In 1973, Ray Anderson created Interface Inc. after realising the need for flexible floor coverings in newly built contemporary offices. Started as a small company with 15 employees, Interface Inc. grew rapidly thanks to the rapid development of office buildings and the use of cutting-edge technology. After a series of acquisitions, Interface became the world leader in modular floor coverings in 1987. In 1994, Ray Anderson was asked by an internal task force to prepare a briefing on Interface's environmental vision. Their request caught Ray's attention. With no clear answer in mind, apart from the traditional compliance with legislation, he started to research environmental literature. Reading *The Ecology of Commerce* by Paul Hawken was the real trigger to what would become a sustainability journey: "I read it and it changed my life, it was a real epiphany." At that stage, the challenge of making Interface Inc. a sustainable enterprise was enormous. Carpets and fabrics were made with petrochemicals and the company's environmental footprint was disastrous: Interface was generating 10,447 tons of solid waste, 605 million gallons of contaminated water, 704 tons of toxic gases and 62,800 tons of carbon dioxide per year.<sup>5</sup> Ray Anderson commissioned a task force, the "Eco-dream Team," made up of internal employees and external environmental experts and gave them "a mission to convert Interface to a restorative enterprise." This bold project was called "Mission Zero" and it was tied to the promise to "eliminate any negative impact Interface has on the environment by 2020." Since then, the company has definitely integrated environmental challenges. In a little more than a decade, success at Interface includes a decreased dependency on fossil fuels by 45% and a dramatic reduction of water and landfill use by 80%. The company has introduced new products such as The Evergreen Lease: Instead of selling the carpet, Interface offers a lease to its clients. The carpet is made of recycled material and Interface's services include installing the carpet, cleaning and maintaining it, and replacing the worn out squares one at a time. This system ensures that Interface owns the carpet throughout its lifecycle and can therefore re-integrate used parts in the system to create a new carpet. Interface's commitment to sustainability has been recognised by a plethora of awards, and its founder has been named one of the 100 global heroes for the environment by *Time Magazine*. After having implemented a 14-year strategy of sustainability, Interface is still the global leader in its sector. Its financial performance – assets of US \$879 million<sup>6</sup> - demonstrates that environmental awareness is compatible with profitability.

Businesses leading the "green economy" will benefit from competitive advantages and will be recognised as leaders by customers and their sector.

### An exploratory study on the process of becoming green

What do green businesses look like? Do they offset their carbon emissions? Are they certified by national, European or international standards? Have they switched to alternative energy sources? Are their em-

<sup>5</sup> Anderson R., @issue, Volume 6, Number, *Less is More at Interface*, URL: [http://www.cdf.org/issue\\_journal/less\\_is\\_more\\_at\\_interface.html](http://www.cdf.org/issue_journal/less_is_more_at_interface.html) (accessed on March 22, 2009).

<sup>6</sup> Interface, Inc., *A Model of Organizational Sustainability*, KyotoSmart website, URL: [http://www.kyotosmart.net/pdf/case\\_interface.pdf](http://www.kyotosmart.net/pdf/case_interface.pdf) (accessed on April 12, 2009, p. 1).

employees acting as green activists? Have they integrated the concept of environmental sustainability within their overall strategies? Or, are they all of the above at once?

And, most importantly, how do green businesses manage this transition? What does the journey towards sustainability look like? A lot of specialised literature focuses on specific measures and tools to implement sustainability. However, evidence suggests that, unless sustainability strategies are fully integrated and people within the organisations are actively engaging with those strategies, change will be very limited. Scholar Bob Doppelt undertook a three-year study to understand the key success factors in transforming a business towards sustainability. He found that “few leaders fully grasp the deep-seated paradigm shift inherent in sustainability; further most do not know how to stimulate widespread cultural change. These failings combine to limit the ability of most organisations to adopt meaningful sustainability efforts”<sup>7</sup>. This suggests that the barriers to undertaking successfully sustainable business strategies reside not only in technical aspects of carbon footprinting or waste management but, rather, in organisational development aspects related to culture, integration and paradigm shifts.

Research shows that few businesses truly understand what sustainability is nor do they grasp the importance of culture and people within the change process:

- **Failure to understand positive attributes of environmental sustainability**

A study on Sustainability and Innovation<sup>8</sup> shows that, in Spain, executives believe that more than 60% of companies who engage with sustainability issues do so for image purposes only. The report also highlights that the numerous businesses not yet engaged with sustainability fail to see tangible benefits (more than 60%), arguing that leadership is not interested (55%) or perceiving environmental concerns as a cost with no associated benefits (52%).

- **Failure to get past internal barriers**

A global survey<sup>9</sup> by the UN Global Compact found that there are major internal tensions and barriers preventing companies from committing to sustainability concerns. The main two are: Competing internal strategic priorities (43%) and the perceived complexity of implementing a sustainability strategy across all business functions (39%). Other obstacles include: a failure to recognise a link to value drivers, employee resistance and the difficulty in engaging with external groups.

<sup>7</sup> Bob Doppelt, *Leading Change Toward Sustainability: A Change-Management Guide for Business, Government and Civil Society*. (Greenleaf Publishing)

<sup>8</sup> Infonomia and UAB university (2009), *Sustainability and Innovation In Spain*, March 2009, (in Catalan)

<sup>9</sup> UN Global Compacts “Annual Review” 2007.

In this study, we propose using business cases to illustrate what sustainability can look like and how it can be an opportunity more than a cost. By analysing how companies have changed to become green, we hope to prove that it is possible to engage in a sustainability journey, providing guidance on this process and demystifying it.

We propose exploring the reasons behind the successful transformation of sustainability leaders with the belief that their stories can help inspire others to follow their example.

### Learning from leading green businesses

In addition to the two major obstacles mentioned above, if many businesses have not yet embarked on a sustainability journey, it is due to a complex combination of the following mental blocks:

- Short-term thinking – not projecting the company's vision into the future
- Cost focus - Considering that environmental sustainability is a cost, bringing inefficiencies, with no clear added value
- Lack of imagination and understanding - Failing to imagine what sustainability could look like and to comprehend how to integrate sustainability within a company
- Fear of the unknown: Fearing that there will be too much work involved in incorporating environmental sustainability and that it will fail.

If humanity is to address the threats associated to climate change and other environmental issues, it is essential for businesses to overcome these mental blocks and grasp the breadth of opportunities that sustainability represents. To be inspired to change, companies need more evidence demonstrating the added value environmental sustainability has already brought to other businesses, as well as examples of what sustainable companies look like and guidance on the internal process of change itself.

The majority of literature on environmental sustainability within the business community emphasises the threats represented by environmental challenges and offers practical advice on implementing restricted, piece-meal projects such as carbon footprinting or waste management strategies. Whilst this guidance is useful, it will not trigger any major change nor will it integrate “green” paradigms.

To inspire broader change and provide a clearer picture of what the internal transformation process towards environmental sustainability entails, new trends are moving away from the conventional discourse on environmental sustainability based on a reduction of impact. For example, we have the positive approach of Michael Braungart and William McDonough (Cradle To Cradle) who “believe that humans can incorporate the best of technology and culture so that our civilised places reflect a new view . . . where human activities and ecosystems are mutually enriching.” With

this underlying assumption in mind, we shall conduct an exploratory study centred on the following questions:

*How do leading companies transform themselves to create expanded and integrated sustainability models focused on profitability while creating positive environmental change?*

*What can we learn from the strategic change processes implemented by leading sustainable businesses?*

The **underlying objective** of this study is **to inspire businesses to integrate environmental sustainability** into their own practices. For this we propose:

- Proving that leading businesses have found value in integrating environmental sustainability whilst remaining profitable,
- Illustrating what green companies can look like, and
- Providing recommendations regarding the key steps involved in the actual change process.

Incorporating environmental sustainability within a business is a **non-linear journey** which requires deep change. To systematically guide our primary and secondary research goals we will explore: the following themes, as the **three main strategies** need to be given special attention during the change process:

- Cultural Change: Foster a dynamic, positive and widespread organisational “green” paradigm, involving all the levels in the organisation.
- Open Collaboration: Collaborate with strategic stakeholders to inspire wider and deeper change.
- Eco-innovation: Rethink operational and internal processes to reduce footprints and increase innovation of products and services-



## 2. What do we mean by “green business”?

This study is prompted by a central question: How do leading companies transform themselves to create expanded sustainability models focused on profitably while creating positive environmental change? To answer this question, we first need to understand what characterises green businesses. If existing sustainability definitions are useful to imagine what a sustainable society could look like, there is no widespread consensus on the definition of a green company. Below we argue that green companies are shaping a new business model based on environmental sustainability. The latter implies profound changes in business activities which need to be widely applied to have a significant impact.

**10** The Brundtland Commission was created by the United Nations in 1983 to provide solutions to growing concerns about “the accelerated deterioration of the human environment and natural resources and the consequences of that deterioration for economic and social development.” Brundtland Report (1987), URL: <http://www.worldinbalance.net/agreements/1987-brundtland.php> (accessed on February 13, 2009).

**11** Paul Hawken, Amory Lovins and Hunter Lovins (1999), *Natural Capitalism: Creating the Next Industrial Revolution*. London: Earthscan.

### Exploring existing sustainability approaches

#### Definition of Sustainable development

The concept of sustainable development was defined by the Brundtland Commission in 1987 as “the ability to ensure that **humanity meets the needs of the present without compromising the ability of future generations to meet their own needs.**”<sup>10</sup> The Commission’s report argues that sustainable development is a profound change journey “in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutions” need to be transformed in a process that will necessarily involve “painful choices.” Because it provides a broad societal objective of durability and advocates mainstreaming environmental concerns, this definition offers an interesting starting point to introduce the topic of sustainability.

#### The macro framework: Natural Capitalism

Lovins and Hawken’s *Natural Capitalism*<sup>11</sup> Theory is based on what they see as the inherent paradox of industrial capitalism: The economy is based on the production of goods which uses more natural resources than can be regenerated, with no financial (or any other kind) value given to those natural resources. They advocate the “Next Industrial Revolution” based on four central principles:

- Increasing resource efficiency,
- Eliminating the concept of waste,
- Shifting the structure of the economy from processing materials to being service based, and
- Investing in natural restoration.

This approach is very much centred on transforming the rules of production and promoting technological innovation. It seems like a very good theoretical base to start approaching environmental business sustainability.

The definitions above help us understand some aspects of sustainability as their vision of the concept comprehends entire societies. However, they do not help us picture what a particular sustainable business would look like. Because there is no globally or widely accepted definition of a sustainable business, we propose defining one by looking at the general characteristics of environmental sustainability.

## Shaping our understanding of green businesses

### A new conception of business models based on environmental sustainability

The very idea of involving businesses in environmental sustainability calls for a paradigm shift. It goes well beyond the traditional concept of a business solely concerned with making profits while respecting current legislation and, in some cases, contributing to the well-being of its employees. It involves profoundly transforming the rules of the game and creating “new ways of thinking and perceiving”<sup>12</sup>. According to a UN Global Compact study<sup>13</sup>, 95% of the 400 businesses participating in this UN initiative consider that the demands on their companies from employees, consumers, local communities and other stakeholders are broader than they have ever been. However, because the traditional business paradigm is so deeply rooted in Western societies, integrating these new social and environmental demands does not come naturally. Peter Senge argues that the Industrial Age is comparable to a bubble where the constructed reality within the bubble is so entrenched that it becomes hard to face wider realities and imagine an alternative way of functioning. He describes the bubble as being based on a “take, make, waste” approach which considers natural resources as free and infinite. He advocates the creation of a “life beyond the bubble,” transforming values, beliefs and assumptions to take into account the protection and regeneration of natural ecosystems. Environmental business sustainability is therefore a profound shift in mindset to try to find solutions to the paradox of a system based on producing more material goods beyond the limits of natural resources.

<sup>12</sup> Peter Senge, 2008, *The Necessary Revolution How Individuals and Organizations Are Working Together to Create a Sustainable World*. New York: Doubleday.

<sup>13</sup> Oppenheim J., Bonini S., Bielak D., Kehm T., Lacy P. (July 2007), *Shaping the new rules of competition: UN Global Compact Participant Mirror*, McKinsey&Company, p. 14.

## The scale of the environmental challenge implies profound changes in business models

Environmental issues such as climate change have no frontiers; they are the result of a very complex web of human activities. Scientists agree that the current climate change challenge will require humanity to reduce its gas emissions by 80% in the next 20 years.<sup>14</sup> However, the reality is that the world is more likely to double them; a report by Energy Outlook states that the global demand in energy will rise 57% by 2030.<sup>15</sup> It is hard to see how small changes can address such a wide and pressing issue. The president of the European Commission, Jose Manuel Barroso, talks about the need for “a third industrial revolution” encompassing all parts of society, from individuals to governments and all business sectors.<sup>16</sup>

## The challenge of translating environmental complexity into practical actions

It is easy to feel overwhelmed by the challenge. Where do you start and how can you monitor the impact of changing small parts of the complex global system? Sarah Severn, Director of Corporate Responsibility for Nike, believes that the main sustainability challenge is translating the concept into “actionable, practical steps.”<sup>17</sup> This is also mentioned as one of the main barriers to implementing environmental business strategies by the companies participating in the UN Global Compact. In fact, there is no “one size fits all” model. Whilst tools such as Cradle to Cradle or carbon footprinting provide useful instruments for change, there is still a lot left to be done regarding new approaches rather than applying ready-to-use frameworks. The need to innovate and provide creative, long-term alternatives is recognised as a major characteristic of business environmental sustainability.

## Protecting the environment is intrinsically linked to social sustainability

Whilst this study focuses mainly on the environmental side of sustainability, we must recognise that protecting the environment is fundamentally linked to social protection. The Brundtland Report states that “a world in which poverty is endemic will always be prone to ecological and other catastrophes.” John Elkington’s triple bottom line approach<sup>18</sup> is another common way to portray sustainability; it defends a balance between profitability, protecting the planet and taking care of people.

<sup>14</sup> Harvey F. (2 December 2008), “The Heat is on,” *The Financial Times*, Climate Change Series: Part III, Business, p. 6-8.

<sup>15</sup> Energy Information Administration, “International Energy Outlook 2007”, p. 14.

<sup>16</sup> Harvey F. (2 December 2008), “The Heat is on,” *The Financial Times*, Climate Change Series: Part III, Business, p. 6-8.

<sup>17</sup> Mackrae K., *A Natural Step Case Study: Nike*, URL: <http://www.naturalstep.org/en/resources> (accessed March 1, 2009, p. 8).

<sup>18</sup> John Elkington, 1998 *Cannibals with Forks: the Triple Bottom Line of 21st Century Business*. Oxford: Capstone.

## Other aspects of environmentally sustainable business

### Business environmental sustainability and Corporate Social Responsibility (CSR)

Many companies approach sustainability through their CSR policies. In principle, the ultimate goal of CSR should be sustainable development. However, in practice, whether it takes the form of support from Non Governmental Organisations (NGOs), employee volunteers or community projects, CSR is often approached as a side project, separate from the company's core business activities. The organisation Forum for the Future argues that CSR often implies a reactive approach which does not seek to mainstream environmental concerns but, rather, works within the existing framework without challenging it<sup>19</sup>. To avoid this pitfall, some have stopped talking about CSR and have replaced the term with broader concepts such as 'citizen companies' or 'relational companies'<sup>20</sup>.

<sup>19</sup> Epstein, J.M. (2008). *Making sustainability work. Best practices in managing and measuring Corporate Social Environmental and Economic impacts*. Sheffield: Greenleaf.

<sup>20</sup> Lozano, J.M. (2010). *The relational company: responsibility, sustainability, citizenship*. Bern: Peter Lang.

### Environmental sustainability means more than compliance

Environmental sustainability does not merely consist of complying with existing or future regulations. It means proactively seeking to create innovative business models which will lead the way for future regulations. Compliance implies seeing environmental issues as a cost, whereas sustainable businesses consider it as an opportunity to innovate and improve performance and efficiency. Although regulation is needed to create environmental sustainability standards and ensure coherence regarding actions, businesses also have a responsibility in this area. They are responsible for the impact of their activities and they have the potential to design new frameworks based on sustainability.

### Environmental business sustainability is profitable

The triple bottom line of sustainability integrates People, Planet and Profits. Sound environmental measures should be profitable in order to be fully sustainable. Blu Skye Consulting argues that not incorporating financial requirements within environmental measures relieves the pressure to innovate, a key success factor.

### Integration is key

Sustainability should be fully integrated within the organisation and not merely be the focus of one department. In fact, each individual employee

and all company teams have a role to play both in the design and the implementation of sustainable strategies. If sustainability strategies are not integrated within the whole organisation, the results will be narrow and limited to the specific departments in which environmental considerations are taken into account.

### **No one size fits all**

We understand sustainability as a complex aspiration. As of yet, truly environmentally sustainable businesses are scarce. In this context, the process of change itself is central and needs to be focused on fostering innovation. A plethora of tools exists to evaluate progress in terms of energy efficiency, carbon strategies and waste reduction. There is no unique way of applying them. Each business can create its own path towards sustainability.

### **Eco-effectiveness and sustainable value**

Braungart and McDonough criticise the concept of 'eco-efficiency' whose objective is to make existing business activities as efficient as possible and reduce their environmental impact to a minimum. They argue that this model is too narrow in scope and advocate, instead, a wider and more positive concept they call 'eco-effectiveness': "The key is not to make human industries and systems smaller, as efficiency advocates propound, but to design them to get bigger and better in a way that replenishes, restores, and nourishes the rest of the world." We understand environmental sustainable businesses as dynamic organisations seeking to create sustainable value.



### 3. Stepping stones to green the business

**21** Senior, B.; Fleming, J. (2006). *Organizational change*. Third Edition Essex: Prentice Hall.

To analyse organisational change towards environmental sustainability, we will apply theories from change management. Senior and Fleming compare “rational-logic” models of change to models of change centred on organisational politics, culture and values<sup>21</sup>. They argue that the first approach is suitable for situations of “hard” complexity characterised by problems which can be difficult but circumscribed to one area of the organisation. In contrast, the second approach is more relevant for circumstances of “soft” complexity which have a much more widespread impact throughout the organisation, there are qualitative aspects and disagreements about the solutions. This classification is an interesting introduction to the subject of change management as it sets out basic principles: Change can take many different forms; the type of change will influence the approach chosen; and, finally, there is a difference between approaches based on rational thinking and approaches incorporating psychological analyses.

Environmental challenges are more in line with the situation of “soft” complexity described above. In fact, all parts of an organisation are interconnected and have a role to play in finding creative solutions towards eco-effectiveness. Moreover, introducing environmental sustainability within the remit of a company’s agenda is a new conception of business which calls for a profound paradigm shift. This shift will certainly be driven by values and organisational culture though it is enabled by people. Organisational development sees people as the central enablers of change and advocates of focusing change programmes on communications, empowerment, learning and collaboration.

In the section below, we rely on change management literature to expand our analysis framework based on three stepping stones:

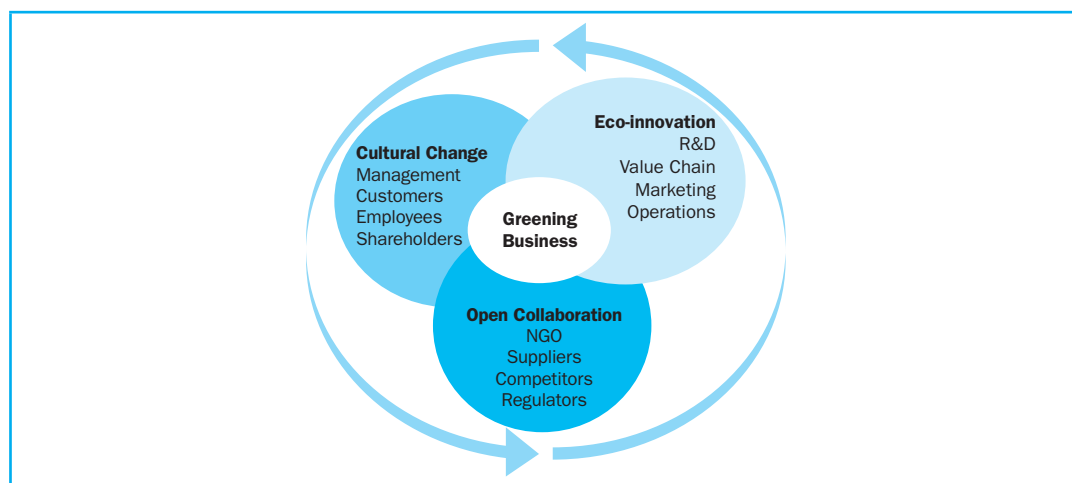
- Because including sustainability within business strategies calls for a profound paradigm shift, we will analyse the role of organisational culture: How have sustainable leaders engaged their employees? How can a positive environmental sustainability paradigm be created within an organisation?
- Because sustainability is not an individual quest but, rather, demands global action and cooperation, we will seek to understand the role of collaboration within the change process: How do leading businesses inspire their stakeholders to follow their direction and how are they inspired by others?

- Because of the complexity of translating sustainability into action, we will examine transforming operations: How can operations be reworked to better integrate environmental sustainability?

22 Senior and Fleming (2006).

These three aspects or stepping stones are reflected in Figure 1 below:

**Figure 1. Green Business Paradigm**



Source: the authors.

## Transforming organisations through change management

What constitutes culture? Culture is usually seen as the “soft” side of the organisation, famously known as “the way things are done around here”<sup>22</sup>. Culture is also primarily concerned with the role of people in organisations. However, people naturally tend to be resistant to change, so what processes can persuade people to alter the way they operate? We look at general cultural change management approaches and see how they fit in with green agendas.

### Organisational culture: An introduction

Organisational cultures have common traits. Firstly, culture is shared by a group (in this case the members of an organisation); it is therefore primarily concerned with people. Depending on the organisation’s size and cohesion, there can be several internal and sometimes com-



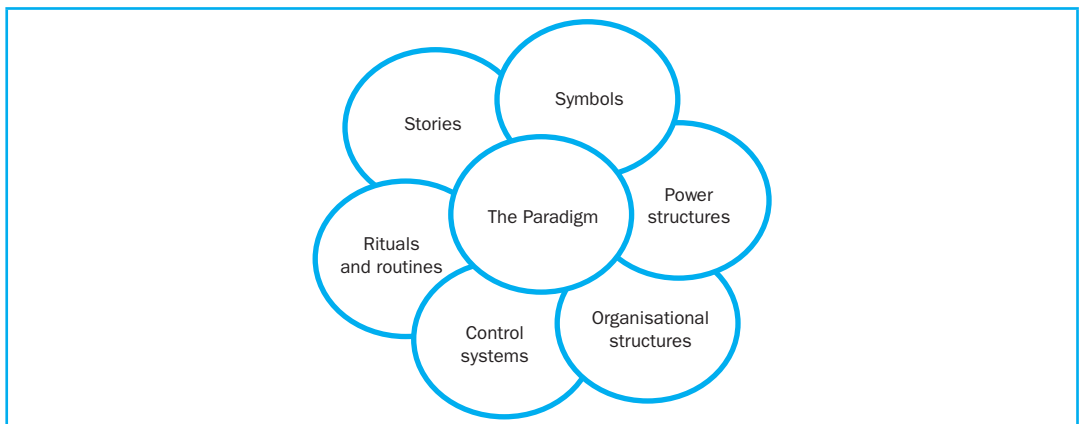
peting cultures. Secondly, culture is generally considered as the informal side of an organisation. It encompasses all the habits, attitudes and beliefs that are not necessarily written down. The cultural web (see Figure 2 below) explains that cultural manifestations (stories, symbols, power and organisational structures, control mechanisms, rituals and routines) are, in fact, the visible sides of a central paradigm based on core organisational values. Because culture is not necessarily written down and because it is centred on the shared values within a specific group, they might be difficult to understand, especially for people outside the given group. However, as Schein<sup>23</sup> argues, organisational cultures are discovered and developed by the members of the group themselves. Thus, culture is dynamic and always evolving. Finally, the new beliefs can be taught to new members. We can then deduce that, if culture can be learned, it can be changed.

<sup>23</sup> E. H. Schein, 2004. *Organizational Culture and Leadership*. San Francisco: John Wiley & Sons.

<sup>24</sup> Johnson et al. in Senior B., Fleming J., (2006): *Organizational Change*, Harlow: Prentice Hall.

<sup>25</sup> Senior and Fleming (2006).

**Figure 2. The Cultural Web<sup>24</sup>**



Source: Johnson et al. en Senior, B.; Fleming, J. (2006). *Organizational Change*. Harlow: Prentice Hall.

## The importance of culture in change management

### Change Management & Organisational Development

Organisational development is the change management approach concerned the most with culture. French and Bell define organisational development as “a long-term effort, led and supported by top management, to improve an organisation’s visioning, empowerment, learning, and problem-solving processes, through an ongoing, collaborative management of organisation culture”<sup>25</sup>. Organisational development centres on

the role of people in change management, focusing on empowerment, learning, collaboration and culture. It is participative and process oriented.

Another important element is that this approach conceives organisations as complex systems where all parts are interconnected. Therefore, the change process cannot be merely concerned with transforming one fraction of the organisation; it has to modify the whole organisation. In organisational development, change is a process; it is not a short-term mechanistic plan but, rather, long-term development.

### **Resistance to change, a major cause of failed change initiatives**

A cause of failure among change initiatives is internal resistance. Lewin's Force Field Analysis seeks to address this by advocating the establishment of an equilibrium between the forces driving and resisting change. Lewin advocates that a process of change is successful only if the internal forces driving the change outweigh the internal forces resisting it<sup>26</sup>. He considers that traditional management uses force to drive change and argues that, the more energy is used to force the change, the greater the resistance. As an alternative, he suggests focusing on understanding the resistance: Why are people opposed to changing the agenda? Do they feel threatened? Do they understand the need for change? He believes that, to achieve the equilibrium necessary for change, attention should be focused on understanding and addressing the obstacles and resisting forces rather than forcing change through the use of power.

Lewin's framework shows that the reality of change management is more complex than it appears; it is based on a fragile balance. For change initiatives to work, securing commitment is more effective than using power and force.

### **How you can engage people in change initiatives and influence culture change?**

Kotter argues that the biggest mistake managers make when launching a change initiative is to allow too much complacency regarding the reasons behind the transformation<sup>27</sup>. To avoid this pitfall, he advocates establishing a sense of urgency by largely communicating the risks involved in maintaining the status quo while, at the same time, explaining the opportunities to be found in adopting a new approach. The opportunities or "why people should strive" to make the image a reality, should

**26** Cameron, E.; Green, M. (2007). *Making sense of change management. A complete guide to the models, tools and techniques of organizational change*. London: Kogan Page.

**27** Kotter, J.P. (1996). *Leading change*. Cambridge, Mass: Harvard Business School Press.

be crystallised in the development of a new vision. For Kotter, a good vision serves three objectives: First, clarifying the general goal and providing a positive picture of the future; second, motivating and inspiring people to work towards it; and, third, synergising all the efforts in the same direction.

28 Cameron & Green (2007).

Many argue that, to be effective, this vision should be shaped by the people who are going to implement it. More broadly, not only the vision but the new direction of the organisation should be supported by a wide range of people within the organisation. Buchanan and Boddy insist on the central role of change agents in shaping the vision, communicating it and facilitating the implementation of the new strategies. Kotter argues that a “guiding coalition” is more effective. This coalition should include enough positions of power, represent the different sets of expertise and knowledge necessary for the organisation, have enough credibility within the organisation and count on enough leaders to drive the new strategies.

Finally and perhaps most importantly for successful cultural change, it is crucial to “insist on collective ownership of the change”<sup>28</sup>. In fact, people are key to the change process’ success or failure. Throughout the organisation, they will transform (or not) the way they work to make the vision a reality. For this reason, people need to be involved in the process from the beginning and then empowered to be able to make the necessary decisions in favour of the change agenda.

**Figure 3. Eight stages to lead organisational change (Kotter)**

1. Establishing a sense of urgency
2. Creating the guiding coalition
3. Developing vision and strategy
4. Communicating the change vision
5. Empowering employees for broad-based action
6. Generating short-term wins
7. Consolidating gains and producing more change
8. Anchoring new approaches in culture

### **Building a culture of sustainability**

If transforming organisational culture plays a major role in change management initiatives, is this also true for a change in favour of sustainability?

## **The necessary paradigm shift: From industrial thinking to green lenses**

As mentioned above, environmental sustainability implies a new conception of business models, very distant from the mainstream and traditional industrial paradigm. This model moves away from a “take/ make/waste” approach to a more circular and regenerative production system. This new conception needs to be reflected throughout the organisation to create new ways of functioning. Different ways of thinking lead to different ways of behaving. Therefore, if people working in organisations are to be influenced in terms of their actions, they first need to be convinced to transform their values and ways of thinking. Furthermore, environmental sustainability is not a “one size fits all” model applicable to any organisation. As such, people need to create innovative ways of working, suitable to the specificities of the organisation. This flexibility can be created through cultural change.

To initiate profound, long-lasting cultural change, specialised literature in change management and sustainability suggests focusing change processes on four main triggers:

### **1. Design a Vision**

A great deal of thought needs to be given to the exact nature of the company's ambitions: How does the willingness to change the business model translate into the organisation's strategy? Designing a compelling vision which explains the need for change and the expected result is one of the most common first steps towards cultural change. What should the vision look like? Peter Senge argues that visions should be defined broadly as they will necessarily change as the process evolves. He argues that visions are powerful ways of attracting more people and unifying strengths. For Bob Doppelt, a sustainability vision creates a shared set of beliefs and common mental images and should “provide an absorbing positive image about the future”. Change management authors agree that visions should be drafted in simple, clear and straightforward terms to achieve maximum commitment.

### **2. Expand communications during the change process**

If a compelling, positive vision embracing environmental sustainability is central to the change process, it is not an end in itself. In fact, a vision provides a sense of direction, but it should not be just a written compass. Clearly, a vision is only useful if it is widely known by the members of the organisation. Because people have a natural inclination to be resistant to large transformations and change, in general, the need to change and the organisation's new direction need to be continuously communicated to personnel to encourage their participation. Kotter's motto is: “Repeat, repeat, repeat” both the reasons for change and the new vision.

### **3. Develop training programmes and empower people**

Bob Doppelt talks about the importance of ongoing learning as a particularly effective approach to generate the right information and plan to adopt informed actions on environmental sustainability. In fact, visions of being green embrace so many different realities in each company. And innovation can only be successful if it is based on correct data and information. Training pro-

grammes and rewarding learning help convey the new environmental sustainability values. As for any new change agenda, people need to fully grasp the underlying concepts to successfully implement them. Environmental sustainability is complex, and human understanding of this field is constantly evolving. This implies a need to continuously update the organisation's knowledge. Training and ongoing learning also lead people to feel empowered to innovate.

#### 4. Ensure integration through leadership

Is this a prerequisite or can the process start in another part of the company? Epstein argues that the most successful sustainability programmes are top-down. Bob Doppelt adds a nuance to this analysis, suggesting that, if an organisation lacks vision from the top, the rest of the organisation can try to engage in a bottom-up approach. The bottom line is that, to design and convey a compelling vision, the new “green” paradigm needs to be embraced by the top of the organisation, the only part which has the power to successfully align the whole organisation. In fact, sustainability is “not a peripheral task to be relegated to public relations or CSR department; it requires leadership by the CEO and coordination throughout the organisation”<sup>29</sup>. Integration enables organisations to maximise the full potential of their environmental sustainability measures: If every part of the organisation is involved, information will circulate more easily; crucial data that would otherwise have remained known only by a few will be disclosed to the whole organisation. Finally, the consultancy firm, Blu Skye, argues that “aggressive goals from the top can provide pressure and incentive to drive the search for breakthrough innovations that create sustainable value”<sup>30</sup>.

Despite evidence that culture is central to successful change processes for sustainability, a McKinsey report about companies' perceptions of climate change indicates that more than 70% of executives do not include sustainability/climate change targets within their people management strategies.<sup>31</sup>

<sup>29</sup> Oppenheim, 2007.

<sup>30</sup> Blu Skye Consulting, (2007): *Making sustainability work: understanding the discipline of sustainable value*, <http://www.bluskye.com/> (accessed on August 15, 2009).

<sup>31</sup> McKinsey Quarterly (2007): *How companies think about climate change, a global survey*, [http://www.mckinseyquarterly.com/How\\_companies\\_think\\_about\\_climate\\_change\\_A\\_McKinsey\\_Global\\_Survey\\_2009](http://www.mckinseyquarterly.com/How_companies_think_about_climate_change_A_McKinsey_Global_Survey_2009)

## **Focus on The Natural Step Framework – [www.thenaturalstep.org](http://www.thenaturalstep.org)**

The Natural Step (TNS) is a not-for-profit organisation and an organisational development and planning tool. It is used by communities, businesses (e.g., Nike, IKEA, and Interface) and governments to integrate sustainability visions within their strategies. TNS considers ecological systems to be complex and seeks to position organisations and their strategies within this complexity. The TNS approach echoes many aspects underlined in the section on organizational culture and emphasizes the development of a sustainability vision. The framework is based on five levels: The systems level, understanding the functioning of the broader ecological system; the success level, imagining what success would look like for the organisation; the strategic level, designing strategies aligned with the vision of success; the action level; and the tool level, implementing an action plan matching the strategies. In the following we briefly summarize the first two.

### **1. Understanding the system: The Natural Step Funnel and the Four System Conditions**

*Thinking about an organisations' impact on the rest of the system*

The idea behind The Natural Step Framework emerged in the early 90s. Dr Karl-Henrik Robert, a Swedish oncologist, started to develop a scientific approach to summarise the basic elements needed for sustained life on Earth. His objective was to reach a consensus on the definition of sustainability which would synergise efforts to protect the environment and guide people towards a common objective. He based his thinking on a systems approach: "What happens in one part of the system affects every other part." This framework has been refined over the years and it now uses two main tools to explain the basic scientific elements supporting the sustainability concept.

*Using an image to represent the current environmental situation*

The Natural Step uses a funnel as a representation of the environmental strains and pressures exerted by the economy. As natural resources decline and the population grows, the funnel becomes narrower. Organisations which position themselves within this existing model are bound to fail when the lack of resources does not enable them to satisfy the growing demand. Therefore, the objective of contemporary organisations should be to step out of this vicious cycle to find innovative ways of reversing the trend.

*The Four System Conditions for sustainability*

The second tool has been designed with participation from a community of scientists. It is designed to determine "the basic conditions for sustainability in the ecosphere/society. By understanding what nature looks like in a sustainable society, we can then deduce what we need to change as a society to respect the system conditions for a sustained ecological cycle.

*(Continues)*

### Cuadro 1. The Four System Conditions...

The Four System Conditions...	...reworded as the Four Principles of Sustainability
In a sustainable society, nature is not subject to a systematic increase in:	To become a sustainable society we must...
1. concentrations of substances extracted from the Earth's crust,	1. eliminate our contribution to the progressive build-up of substances extracted from the Earth's crust (for example, heavy metals and fossil fuels),
2. concentrations of substances produced by society,	2. eliminate our contribution to the progressive build-up of chemicals and compounds produced by society (for example, dioxins, PCBs, and DDT),
3. degradation by physical means,	3. eliminate our contribution to the progressive physical degradation and destruction of nature and natural processes (for example, over-harvesting forests and paving over critical wildlife habitats),
4. and, in that society, people are not subject to conditions that systemically undermine their capacity to meet their needs.	4. and eliminate our contribution to conditions that undermine people's capacity to meet their basic needs (for example, unsafe working conditions and insufficient salaries with which to live on).

## 2. Imagining what success would look like: Backcasting from principles

Once the decision has been made to integrate sustainability within the organisation and the broad, complex conditions of a sustainable society are understood, Natural Step recommends spending time imagining a positive organisational future. Keeping in mind the broad sustainability principles for the planet, imagine what type of success it would imply for the company. This method is quite different from the traditional forecasting method which consists of “starting the planning procedure from today's situation and projecting today's problem and trends and what are considered “realistic” solutions today onto the future.” Once a positive image of success has been developed, a strategy can be developed to achieve this vision, thus moving backwards towards the present.

### Collaborating openly with strategic stakeholders

Blu Skye Consulting argues that businesses which have started a sustainability journey should engage in multi-sector partnerships to understand where former practices have had a negative impact on the environment and to find groundbreaking innovations for the future.<sup>32</sup> Collaborating with other businesses, organisations and institutions is central to the success of change processes for sustainability. In fact, it can help companies access valuable data and information across the supply chain and distribution channels. Involving stakeholders in the transition process broadens the impact of a company's sustainability strategies and vision. Engaging with NGOs enables businesses to communicate about objectives, progress and results. Finally, building part-

<sup>32</sup> Blu Skye Consulting, (2007): *Making sustainability work: understanding the discipline of sustainable value*, <http://www.bluskye.com/> (accessed on August 15, 2009).

nerships with specialised organisations (e.g., NGOs, scholars, scientists, etc.) can prove very important in the design of more innovative solutions based on their expertise.

### **Influencing the supply chain**

In a survey linking climate change and supply chain management, McKinsey found that 40 to 60% of a company's footprint resides in its supply chain. However, only 23% of the companies consider climate change when choosing or managing a relationship with a supplier.<sup>33</sup>

Outsourcing is no longer an excuse to free a company from the responsibility of the social and environmental impact of its products or services. Many scandals related to sweatshops in the textile industry have aptly illustrated this argument. Engaging the supply chain in an organisation's quest for environmental sustainability should include strategies such as: More long-term partnerships, closer assessment of the supply chain and collaboration during suppliers' transition towards environmental sustainability.

### **Networking with NGOs, scholars and scientists**

Specialised NGOs, academic institutions and scientific institutes all have expertise in environmental sustainability. This knowledge can play a pivotal role in learning about challenges and opportunities, gathering data and specific research information and adding technical know-how to the design of strategies. They can help a company access cutting-edge technology and information.

Over the last few decades, the professionalisation, recognition and weight of environmental NGOs has increased. They now play a fundamental role in the international arena. Communicating progress and consulting them while developing new action plans avoids confrontational relations between NGOs and companies. For example, Coca-Cola and Greenpeace have recently announced a partnership aimed at eliminating polluting CFCs from soft drink coolers.

### **Look into external communications and engagement with consumers**

In an article aimed at understanding how to "cultivate green consumers," Bonini and Oppenheim<sup>34</sup> argue that companies should aspire to offer more to consumers. The idea is to ensure that consumers understand the benefits of the environmental strategies enacted by the

<sup>33</sup> McKinsey Quarterly (2007): *How companies think about climate change, a global survey*, [http://www.mckinsey-quarterly.com/How\\_companies\\_think\\_about\\_climate\\_change\\_A\\_McKinsey\\_Global\\_Survey\\_2009](http://www.mckinsey-quarterly.com/How_companies_think_about_climate_change_A_McKinsey_Global_Survey_2009)

<sup>34</sup> Bonini, S.; Oppenheim, J. (2008). "Cultivating the green consumer", *Stanford Social Innovation Review*.



company. Businesses should capitalise on their “greenness” and make sure that their efforts are easily understood by their customers.

Furthermore, it seems only logical that working towards environmental sustainability is like a “quest,” a long, complex and potentially very rewarding adventure. Realistically, turnaround will not happen overnight. As a consequence, being transparent about the steps taken but also about the challenges faced and the actions that still need to be accomplished only reassures consumers and partners about the company’s intent. In a context in which false environmental claims (known as “greenwashing”) are increasingly common, transparency can make the difference.

### **Sector-specific clusters: Collaborating with competitors**

Again, environmental sustainability is ultimately a societal objective; the greater the number of people, companies and organisations who are on board, the greater the impact. Business partnerships are developing in this area. The World Business Council for Sustainable Development (WBCSD) is a coalition of 200 companies whose objectives include creating a business case for sustainable development, participating in policy development and promoting best practices in this area. These partnerships have a real potential to change the rules of the game. Facing the same agricultural production challenges for the future (climate change and an exponential growth in food demand), Danone, Unilever and Nestlé have jointly founded the Sustainable Agriculture Initiative. This platform generates knowledge and involves stakeholders in best practice pilot projects.

**35** Holmes R., (March 2 2009), “Wal-Mart wants to be more like us,” *The Guardian*, URL: <http://guardian.co.uk/lifeandstyle/2009/feb/24/patagonia-ethical-outdoor-clothing-interview>

**36** Plambeck E., Denend L., (Spring 2008) *Case Study: The greening of Wal-Mart*, Stanford Social Innovation Review <http://www.ssiireview.org/articles/> (accessed May 3, 2009).

#### **Focus: Wal-Mart taking sustainability to the supply chain**

Tim Elm, Director of Strategy at Wal-Mart, highlights that in terms of sustainability most opportunities for improvement involve suppliers: “If we had focused on just our own operations, we would have limited ourselves to 10 percent of our effect on the environment and eliminated 90 percent of the opportunity that’s out there.”<sup>35</sup> Wal-Mart assures that its new relationships with suppliers are based on long-term commitment as opposed to the 12 to 18-month rotation which was previously common.<sup>36</sup> The company has also built bridges between vendors and local NGOs and supports suppliers with the new challenges that they face by working with organic cotton. For example, the company buys alternative crops when farmers need their land to recover from cultivating cotton which bleeds nutrients out the soil. Wal-Mart has also established a multi-sector partnership involving 14 networks. The company encourages teams to engage with external experts to design goals and measure the company’s environmental performance, to certify products and to accompany suppliers during the transition period. This is quite a revolutionary way of conceiving business, very far from traditional practices of negotiating the lowest prices and short-term commitments.

## Reengineering operations and process through eco-innovation

According to Nicolas Stern, “Action on climate change will also create significant business opportunities, as new markets are created in low carbon energy technologies and other low carbon goods and services. These markets could grow to be worth hundreds of billions of dollars each year, and employment in these sectors could expand accordingly.”<sup>37</sup>

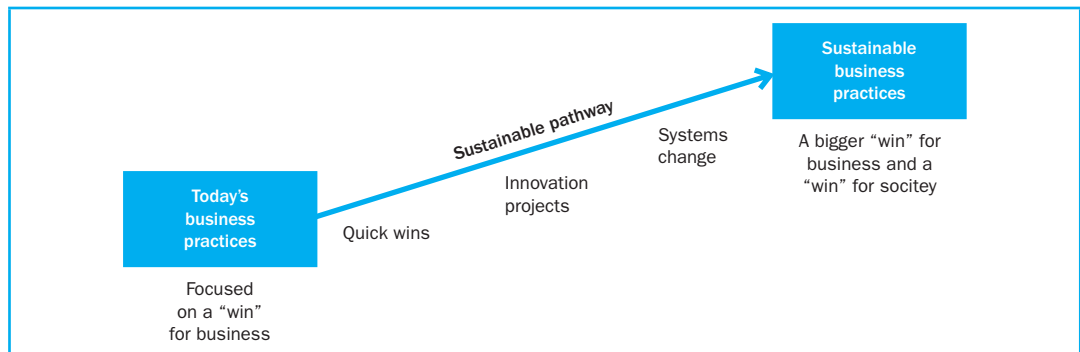
Environmental sustainability represents major operational opportunities. Savings from energy, waste reduction and the emergence of new markets are just a few of the development prospects for green companies. A plethora of tools exists to guide businesses in deciding where to find these opportunities and redesign their operational strategies. Environmental sustainability strategies are not all at the same level; some are tokens while others are truly innovative and have a major impact on the environment. How can one distinguish one from the other? Because there is no “one size fits all” strategy, each company has to target its own approach to the specificities of the company’s context. How do you know if a company has adopted far-reaching operational strategies in its field or are they merely token attempts?

The consultancy firm, Blu Skye, argues that the journey towards sustainability needs to be comprehensive and considered in a strategic way to be fully transformative. Small steps cannot achieve the full potential of sustainability. However, the development of what this firm calls a “sustainability pathway” takes companies through different steps. The first is adopting measures which represent quick wins for the organisation. The second step is developing innovation projects, and the last is implementing deep systems changes. The sustainable pathway is a useful framework to assess the environmental value of operational measures.

<sup>37</sup> Stern N., (2006): *The Stern Review: Report on the Economics of Climate Change*, [http://www.hm-treasury.gov.uk/stern\\_review\\_report.htm](http://www.hm-treasury.gov.uk/stern_review_report.htm) (accessed in August, 2009).

<sup>38</sup> Blu Skye Consulting, (2007): *Making sustainability work: understanding the discipline of sustainable value*, <http://www.bluskye.com/> (accessed on August 15, 2009).

**Figure 4. The Sustainable Pathway<sup>38</sup>**



- **Quick wins:** Planning for quick wins is widely acknowledged as a major success factor in change processes. Schein declares that, in times of change, “leadership must not only insure the invention of new and better solutions, but must also provide some security to help the group tolerate the anxiety of giving up old, stable responses, while new ones are learned and tested” (Schein, 1994). Quick wins help generate confidence in the company’s new direction. In change processes towards environmental sustainability, these measures are also called “low hanging fruits.” This refers to actions which, for example, improve raw materials management and energy efficiency relatively easily and rapidly. Waste reduction strategies and offset of carbon footprint can also be illustrations of quick wins.
- **Innovation projects:** These projects require some level of investment but are still within the company’s mainstream framework. For example, they can include the development of a line of eco-products or the implementation of broader energy efficiency strategies.
- **Systems change:** These strategies are really transformative. They consist of changing the system by re-designing a part or all of operations. They require more investment and bolder strategies. They truly bring sustainable value and drive innovation both in the company and in the industry. The application of the “Cradle to Cradle” protocol, eco-designs and zero waste objectives are all illustrations of systems change. Systems change can also affect relationships with suppliers.

**39** William McDonough and Michael Braungart, 2002, *Cradle to cradle: remaking the way we make things*, North Point Press

### Focus On Cradle To Cradle<sup>39</sup>

A widely applied and recognised framework to work towards eco-effectiveness and create truly transformative strategies, the “Cradle to Cradle” approach is a perfect illustration of how environmental challenges can be seen as opportunities.

#### An initiative stemming from an unexpected synergy

When William McDonough, designer and architect, was commissioned to build a crèche in New York City, he started investigating solutions to avoid using toxic materials. His research led him to meet the German chemist, Michael Braungart. The two talked about their visions of the future and realised that they shared the same dream of a restorative economy which was both profitable and respectful of people and the environment. They used their mutually enriching specialties and experiences in design, architecture and chemistry to trigger a new design paradigm: Cradle to Cradle. Using this approach and its protocol, they have provided consulting services for a wide range of organisations such as Nike, Ford and Herman Miller. William McDonough is also collaborating with the Chinese Government to build sustainable cities.

(Continues)

### **It's not about "less bad"**

Faced with such a wasteful and ill-thought production paradigm, the American architect and the German chemist began thinking about possible alternatives. The authors rejected the traditional environmentalist view which associates growth to danger. On the contrary, they believe that a positive, restorative development is possible. They criticise the mainstream concept of eco-efficiency based on the 3 "Rs": Reduce, reuse and recycle. They argue that this model doesn't go far enough. In fact, reducing only slightly diminishes the waste challenge; if the materials we use are toxic, reducing our landfills will not be good enough. If products are not designed to ensure human and environmental health, reusing them forever will not change their harmful nature. Finally, the contemporary process of recycling does not consist of endlessly reprocessing materials but, rather, "down-cycling" them once, reducing the quality of the first materials used.

### **The metaphor of the cherry tree**

To illustrate their design philosophy, the founders of Cradle to Cradle use a metaphor. Imagine a cherry tree in spring; the blossoms cover the branches and the ground underneath the tree. Are blossoms a waste of energy or of materials? Quite the contrary, they nourish the soil and feed birds and insects. The tree produces more than it needs for its own subsistence and, by doing so, creates nutrients for its whole ecosystem. McDonough and Braungart challenge people to think similarly, to imagine waste as food and eliminate the concept of disposable waste. This is the cyclical model of Cradle to Cradle based on continuous restorative lifecycles.

### **The C2C philosophy**

The Cradle to Cradle approach is based on a positive vision of renewal, restoration and creativity. It advocates the creation of a model which can be designed to grow with positive consequences for the health of humanity and our natural environment: "The marvelous thing about effective systems is that one wants more of them, not less." Cradle to Cradle designs consist of opening the creative lens, moving from concentrating on the product to encompassing the whole system in which the product evolves. It is also about going beyond what we know, transforming the nature of the product itself by concentrating only on the need. Finally, it is opposed to the culture of environmental control; on the contrary, it seeks to optimise the abundance of nature.

### **Rohner Textil ... transforming waste into food**

In the 1990s, Rohner Textil, a textile firm based in Switzerland, faced a major problem. Its waste had been classified as hazardous. The company needed to solve this problem or move the plant from its traditional location. The first solution envisaged by the CEO was to burn the waste with the added advantage of saving fuel. Fortunately, this practice was illegal and other alternatives were sought. William McDonough was invited to the plant to think the problem through. He

*(Continues)*

presented Cradle to Cradle's principles and advocated expanding the view from merely looking at waste to considering the whole production process and imagining waste as food. The solution came naturally: The textiles needed to be designed to become 100% biodegradable. Michael Braungart advised the company on the use of cotton and ramie, both natural and resistant materials. The issue became more complex when trying to find alternatives for the dyes. Tests were carried out on 600 dyes and only 16 were found to be harmless for both humans and the environment. However, with a mix of those 16 dyes any colour could be obtained. The company was thus able to begin to produce biodegradable textiles. In addition, leftovers from the textile products designed by Rohner are now used to create felt which is sold to local farmers to cover their strawberry fields during the winter. The felt decomposes by spring and becomes food for the soil.



## 4. Methodology

40 Senior & Fleming (2006).

### Research methods

#### An exploratory study

This study is exploratory. It is a “research that aims to seek new insights into phenomena, to ask questions and to assess the phenomena in a new light”<sup>40</sup>. We chose this research method for the following reasons:

- We were searching for a qualitative – as opposed to quantitative – outcome.
- Environmental sustainability is not a mainstream business approach as of yet, making it more difficult to find statistical answers.
- The objective was to find compelling, inspiring stories which would be hard to gather using statistical surveys or questionnaires.
- This area is a relatively new research topic which will require further exploration and observation to discover new insights.

#### Theoretical and empirical Analysis

Our exploration was done through:

- A review of the literature, especially on change management and corporate sustainability.
- A selection of four case studies of sustainable European companies.
- An analysis of the internal change processes using both secondary and primary data.

### Selection of case studies

We chose our four case studies according to the following criteria:

- The companies have already started a transformation process,
- They have included environmental sustainability in their visions,
- They take into account the environment in their operations and products or services.
- There is easy accessibility and availability of accurate information.

When choosing the companies, we tried to analyse firms of varying size and from different countries and industries. Thus selected companies are based in the Netherlands (Desso), Sweden (Scandic), Spain (Accio-

na) and France (Havas). And the sectors to which they belong are carpeting (Desso), hospitality (Scandic), energy, water and infrastructure (Acciona), and communication services (Havas). This sample shows that the change towards sustainability is part of the agenda of companies belonging to diverse variety of contexts and circumstances.

## Interview methods

### Semi-structured interview

We held at least two interviews for each primary case study, visiting company offices. The interviews were semi-structured with common questions though ensuring flexibility to expand the questions to the specificities of the organisation analysed. The interviews were recorded and analyzed later.

A preliminary version of the case was sent to companies to review the note and receive feedback. This process was repeated more than once in some cases. However this does not mean that they are subscribing all what is written in the study.



## 5. Case studies

The four business cases are the following :

1. Desso, a Dutch manufacturer of industrial carpets.
2. Acciona, a Spanish construction, energy and water company.
3. Scandic, a Scandinavian hotel chain.
4. Havas, an international group of communication and advertising.



DESSO<sup>1</sup>



Name	DESSO
Sector	Carpet industry
Headquarters	Waalwijk (Netherlands)
Number of employees	903 in two sites (Netherlands and Belgium)
Turnover	199 million Euros
Capital	NPM Capital (private Dutch equity fund)
Certifications	ISO 14001; Global Sullivan principles; GUT 10009; Cradle to Cradle
Energy policy	Reduction of energy consumption by 23% since 1998
Water policy	50% savings in the Belgian factory over a goal of 100% (400 million liters)
Waste policy	90% of waste recycling from factories
Vision	To be the first 'Cradle To Cradle' certified company

Data: 2009.

Desso was created in 1930 by a Belgian manufacturer based in the Netherlands. In its 80 years' history, Desso has developed thorough expertise in carpet manufacturing. An innovative company at heart, Desso launched its artificial grass range for playing fields in 1980 and, a few years later, high quality carpets for the hospitality sector. Throughout its history, the company's ownership has changed several times, though taken over in the late 1990s by Armstrong Flooring, part of Armstrong Holdings Inc. This American company used to produce asbestos, incombustible, chemical-resistant, fibrous mineral forms used for fire-proofing, electrical insulation, building materials and chemical filters before they started to manufacture interior furnishings. Due to this previous use of asbestos, the company faced injury claims that would cost more than the value of the company at the time.<sup>2</sup> After filing for bankruptcy and undertaking a restructuring process, the company had to sell Desso in 2007 to a new management team supported by a Dutch investment group. The new management decided to make a radical change and market Desso as a leading environmental supplier.

### From bankruptcy to strategic transformation

The new team enriched Desso with its experience in multinational corporations, providing a new understanding of marketing and new lenses with which to view the manufacturing process. For a time lost

<sup>1</sup> We would like to thank Stef Kranendijk, CEO, Rudi Daelmans, Director of Sustainability, Marianela Bonavita, Area Director for Spain, and H.G.J. Klijns, Health and Safety Manager, who kindly shared with us their experience during Desso's change process.  
<sup>2</sup> Wikipedia, [http://en.wikipedia.org/wiki/Armstrong\\_World\\_Industries](http://en.wikipedia.org/wiki/Armstrong_World_Industries). (access in July 2009).

within Armstrong's wide range of floor covering manufacturers, Desso needed a new, clear positioning. With the idea of finding a convincing strategy, the management team saw that sustainability was key for the company's further growth since they believed it would be the differentiator in the near future. A chance encounter with Michael Braungart, co-creator of the 'Cradle to Cradle'<sup>3</sup> concept, decided the way forward.

**3** For more information on the 'Cradle to Cradle' concept and methodology, please refer to the section called "Culture" in the Introduction.

Two years into the process of transforming Desso into a 'Cradle to Cradle' company, the management team already began witnessing the benefits of the new approach. The company's market share increased, and the new range of 'Cradle to Cradle' certified carpets were widely commissioned with a special interest from governmental agencies. However, a lot of work still needs to be done to fulfil the team's vision of becoming the first company with 100% 'Cradle to Cradle' designed products and processes. As a result of this new focus, the company's energy efficiency was quickly improved by 23%, while 90% of its waste production was re-used by other industries.

What does this radical journey towards closing the production loop through the 'Cradle to Cradle' philosophy look like? Let's take a closer look.

### **Cultural Change – Using the Cradle to Cradle concept as a philosophy to trigger a paradigm shift**

'Cradle to Cradle' has been used by Desso to trigger a wider paradigm shift towards innovation, taking a new direction after the change in ownership. Now the concept is merged with the company's identity both internally and externally.

#### **A new vision for a new start**

Desso is working towards becoming the first 100% 'Cradle to Cradle' company though, currently, only products have been certified, never a whole organisation. In other words, the company's goal is to achieve a manufacturing process with zero contamination by closing the production loop entirely. Desso's philosophy is shaped around two principles which are directly related to 'Cradle to Cradle' values: A commitment to good product design and superior functionality and the maximisation of the company's positive environmental impact.

### *How was the vision shaped?*

When the newly appointed management team started to consider sustainability as the company's new overarching goal, they soon realised that they were looking for more than a way to improve efficiency (mainly concerned with energy, water and waste reduction). The team was hoping to find a more positive way of incorporating environmental objectives into the firm. The 'Cradle to Cradle' philosophy seeks to design manufacturing processes which, instead of contaminating the Earth, work to replenish it. So, when Stef Kranendijk, Desso CEO, met Michael Braungart from EPEA<sup>4</sup> (and co-founder of the 'Cradle to Cradle' philosophy), the link was easy to make. Stef Kranendijk confirms: "I liked the concept immediately. It made full sense and was quite logical. I then decided that Desso [should] be the first 'Cradle to Cradle' company even if it [meant] high investments." The 'Cradle to Cradle' concept has been translated in Desso's Code of Conduct as the ability to "do the right things right instead of less bad, in order to obtain the biggest positive footprint and to maximize the positive impact of our products and processes." The CEO's endorsement was fundamental to convince the rest of the management team and the investment group owning the company. He was able to defend a concept which had the advantage of improving Desso's environmental performance whilst, at the same time, clearly positioning the company for the present and the future.

### *A workshop to work out the objectives*

A first meeting was organised with Michael Braungart and other EPEA representatives. They needed to test Desso's understanding of the 'Cradle to Cradle' concept to ensure that their objective was not merely marketing. Once agreement was reached, the difficult work started. The management team had hoped that EPEA would guide them step by step through the process. However, because of the emergent nature of both environmental sustainability and the 'Cradle to Cradle' philosophy, this was not possible. Whilst EPEA offered interesting ideas due to their profound knowledge of the environmental impact of the chemicals used, they were new to carpet maker. Therefore, Desso's expertise was necessary to research new operational processes. A workshop was organised with the entire management team as well as representatives from four departments to establish goals, objectives and key performance indicators. They were then translated into actions. Importantly, this new vision was mainstreamed throughout the company; it was no merely limited to an 'environmental' development.

<sup>4</sup> The Environmental Protection and Encouragement Agency (EPEA) was founded in 1987 by Dr Michael Braungart to foster the implementation of Cradle to Cradle principles. <http://www.epea.com>

## **Embedding the 'Cradle to Cradle' concept in Desso's identity**

Like most change processes, sustainability at Desso met with internal resistance. Especially at the production level, it was easier to fall back into old habits. However, the actual challenge seemed to be leaving a cost reduction approach behind. 'Cradle to Cradle' operational processes are difficult to implement and require investments. This approach was difficult to grasp. So the struggle internally really implied going from cost reduction to sustainability. 'Cradle to Cradle' goals are broader than technological innovation; they are about culture. Change is crucial for all employees to share a two-fold vision encompassing both the environmental and sales potential of this new approach.

To launch this new vision, a series of workshops were organised with Michael Braungart. All employees at the head office were trained on 'Cradle to Cradle' principles. Marianela Bonavita, Sales Director for Spain, highlights the importance of this training: "It is very inspirational, and it provides us important technical information and knowledge which is often enquired by our clients." Another important learning shared by the CEO is the value of integration: "It is crucial to make sustainability a real strategy, to provide constant communication and incentives, all in the same direction." All employees have clear goals and incentives to work towards the company's vision of sustainability.

Could Desso have achieved its objectives of environmental sustainability without 'Cradle to Cradle'? It seems unlikely. The concept of a closed production loop as advocated by EPEA became a central part of Desso's identity in two years: "We do not talk about Desso without mentioning 'Cradle to Cradle'," confirms Marianeta Bonavita.

## **Open Collaboration – Spreading the 'Cradle to Cradle' world**

### **Getting the supply chain on board**

A great deal of work has already been done by Desso to extend its efforts to its supply chain. Because the company outsources most of the raw materials needed for carpet manufacturing and some of the processes – such as fibre dyeing – it was crucial to engage suppliers in the process. All the companies have been made aware of Desso's new direction and asked to collaborate.

### **Communicating and spreading the client base**

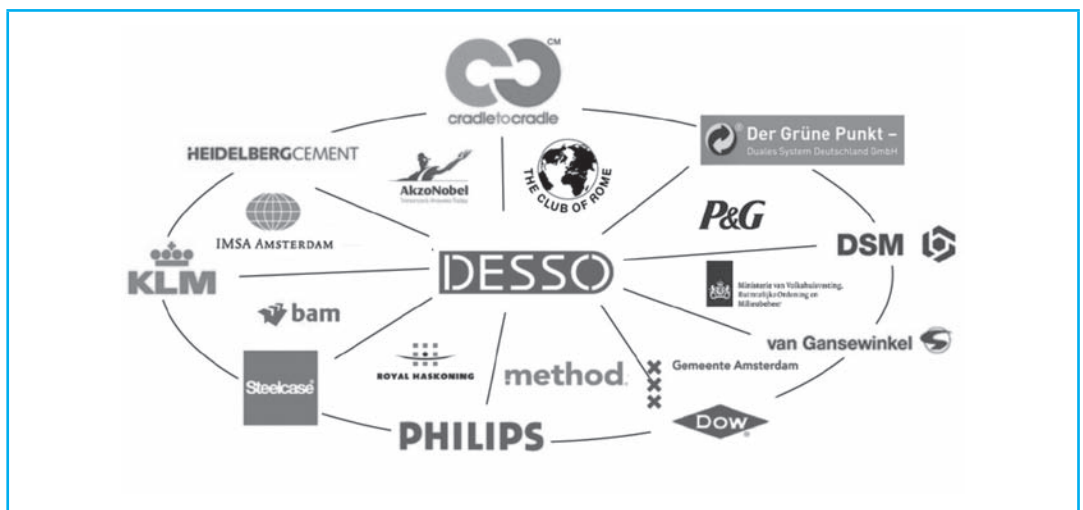
Publically owned institutions such as schools, hospitals and administrations are already very interested in the 'Cradle to Cradle' range developed by Desso. Adopting a sustainability strategy has opened new markets. At the same time, Desso is doing a lot of work to communicate the benefits of their new approach to other stakeholders which have the potential to influence the choice of clients. These stakeholders include architects, designers etc. Finally, Desso has

developed communications material explaining the concept of closed loop production systems, potentially educating clients not just about Desso's products.

### Being 'Cradle to Cradle' ambassadors

"We are interested in the 'Cradle to Cradle' philosophy and we hope to be ambassadors of the concept, because in fact the more companies apply it, the most effective it becomes," indicates Marianela Bonavita. Desso's aspiration is to convince other companies to join the movement. As an illustration, Desso collaborates with consulting companies to foster the development of the concept in Europe. In addition, Desso is studying with the EPEA the possibility of opening a research centre to share the company's experience, learn from other businesses and become an open platform for new companies interested in adopting the concept. Desso's 'Cradle to Cradle' brochure ends with a call for other companies to join the movement: "We believe DESSO belongs to a select group of companies that are responsible enough to consider their influence on our whole world – companies that have the foresight to plan for a different economic future and also possess the necessary creativity to act on these ideas. We believe that these companies will prosper thanks to modern products that have been carefully designed for the new, cyclic economy of 'Cradle to Cradle'. This is why we actively encourage our clients, suppliers and indeed all our affiliates to move forward with us in the exploration of new business models and processes."

### Desso collaborative network



Source: Desso.

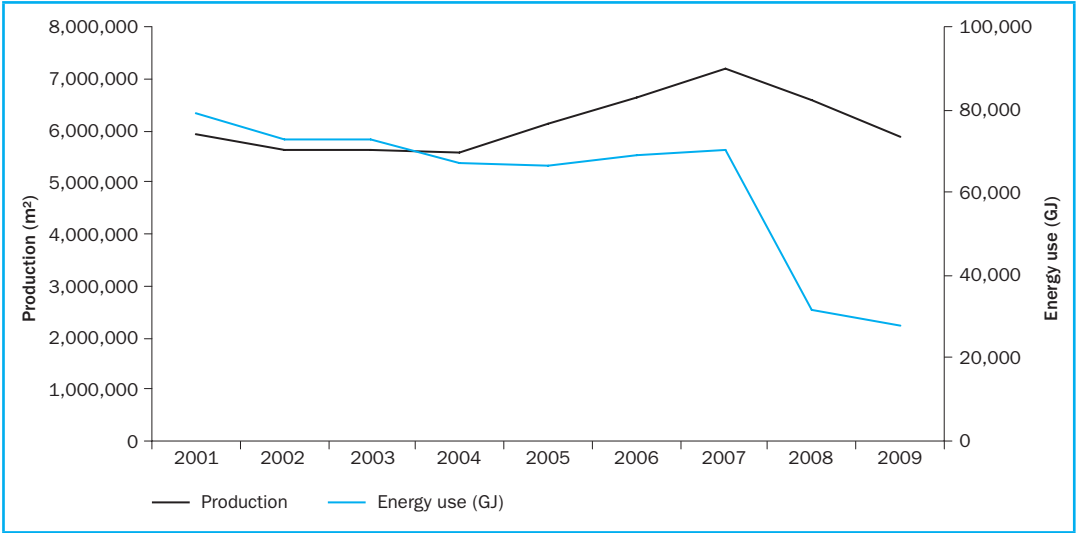
Eco-innovation – A thorough transformation towards a closed loop system

The ambition of becoming the first 100% ‘Cradle to Cradle’ company implies undertaking a thorough shift in production processes. In fact, the concept entails designing products for quick disassembly, manufacturing them using environmentally friendly components, all while using renewable energy sources and reusing water. The whole model is based on the ‘waste equals food’ philosophy, imagining products which will not only preserve the environment but will be designed to replenish the Earth. Diametrically opposed to most current production processes, the ‘Cradle to Cradle’ notion demands a radical change in the dominant paradigm and the complete transformation of operations and products.

A thorough transformation

As highlighted above, Desso has chosen to implement a ‘Cradle to Cradle’ strategy in close collaboration with EPEA. In fact, the management team strongly values earning a certification which provides transparency, clarity and confidence in the processes used. This strategy involves meticulously applying ‘Cradle to Cradle’ rules, guidelines and policies. EPEA is famous for its tough standards, thus giving legitimacy to the concept. Carpet manufacturing and other industries traditionally contaminate the environment by using toxic chemicals and dyes. Therefore, the journey towards sustainability necessarily implies re-engineering processes with an ultimate goal, in Desso’s case, of “producing carpet 100% from post consumer material.”

Reduction of primary energy consumption at Desso factory.



Source: Desso.



A two-step plan has been designed to gradually implement new ranges of certified carpets. The preparatory phase is set to last from 2008 to 2015, the aim being to eliminate all chemicals not acceptable by EPEA standards, to switch 50% of the energy used to renewable sources and to start the construction of a take-back system designed to collect carpets at the end of their lifecycle. The implementation phase (2015 to 2020) will aim to have 80% of the company's products made from post consumer goods. All carpets will be certified by 'Cradle to Cradle' and 100% of the energy consumed will be provided by renewable sources.

### **The first 'Cradle to Cradle' range of products**

Actions undertaken to date have led to a 98% reduction in the amount of water used in the tile printing process, a radical reduction of waste generated and the creation of nine carpets which are fully certified 'Cradle to Cradle'. These products are designed to be reused for other industrial purposes, thus closing technical and biological loops. One is made of recycled materials and another passively captures fine dust from the air, reducing allergens and bacteria. Recognition by the German Test Institute (GUI) guarantees the positive impact on air quality of Desso's carpets. Therefore, the Dutch and German asthma associations are reconsidering what is best for asthma patients, whether hard floors or eco-designed textile carpets. Desso's R&D Department is currently looking at developing new materials to extend the range of 'Cradle to Cradle' certified carpets.

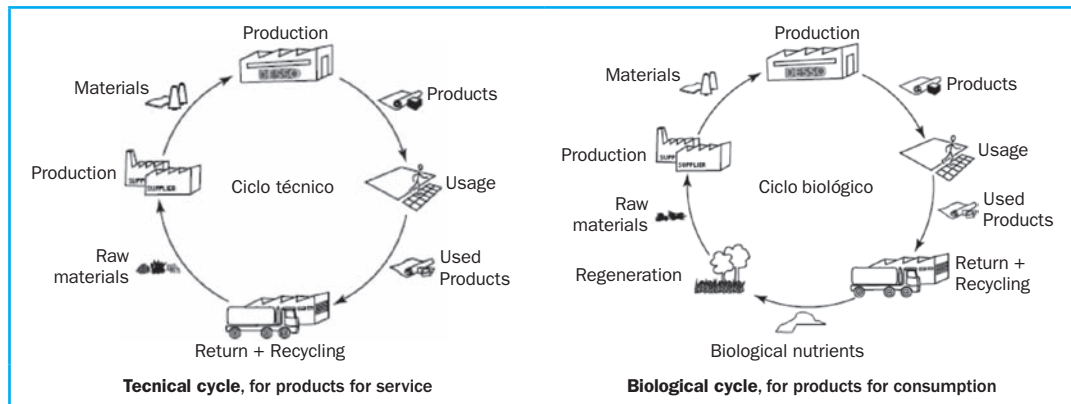
### **The Take-Back Programme – the start of a visionary project**

Because 'Cradle to Cradle' certified carpets are designed to be recycled, the necessary next step is to collect used products to reintegrate them into the process. This is characteristically how the production loop can be closed. This process represents a very large investment (over 3 million Euros per country), a time commitment and the creation of new logistical arrangements to gather used products. Desso has launched its so-called "Take-back Programme" to gather used products from businesses. The idea is to offer the customer to pay for the service which replaces the traditional landfill charge, the objective being to reintegrate the carpets' fibres to manufacture new recycled and recyclable products. In order to be able to reprocess the raw materials for new carpets, the company is currently developing a new machine which will be able to separate the yarn from the backing: The backing will then be reused, and the yarn re-melted to produce new white yarn. The challenge currently faced is finding a suitable transport scheme and improving the environmental impact of the whole chain.

Stef Kranendijk, Desso CEO, explains: "While carpets are recyclable, it's vital to ensure that recycling actually takes place. By collecting used carpets from our customers we not only divert them from [the] landfill, we also safeguard valuable raw materials to be used in new goods. The 'Cradle to Cradle' cycle is especially challenging in an industry like ours, where millions of square meters of worn out carpet are potentially thrown away every year. But this is precisely why it is so important that we adopt this advanced approach, rather than simply complying with current environ-

mental legislation. By sourcing sustainable raw materials, introducing new manufacturing methods and collecting used carpets from clients, we are doing everything to achieve a closed loop system.”

### “Cradle to Cradle” technical and biological cycles



Source: EPEA.

## Lessons Learned

### Cultural Change – Using the Cradle to Cradle concept as a philosophy to trigger a paradigm shift

**1. Develop an ambitious and positive vision of sustainability.** Turning around a company in danger, the bold and ambitious vision of transforming Desso into an environmental leader was critical to the company’s success.

**2. Use an inspirational philosophy and methodology to implement the vision.** Clearly, ‘Cradle to Cradle’ was both instrumental and inspirational for the company. It supported Desso by providing a philosophy and guidance throughout the whole change process.

**3. Expand internal and external communications during the change process.** The extensive training of managers and employees created the necessary awareness about the environmental challenges faced by the carpet industry. In addition, the promotion of the ‘Cradle to Cradle’ philosophy on Desso’s websites and leaflets and at international fairs made the journey a no-return trip for the company’s stakeholders.

**4. Ensure integration through internal and external leadership.** The combination of environmental vision of ‘Cradle to Cradle’s founder and the leadership of Desso’s CEO fostered the integra-

tion of sustainability into the company's DNA, giving incentives to all employees to work towards this goal.

### **Open Collaboration – Spreading the 'Cradle to Cradle' world**

**5. Involve the whole supply chain.** The strong commitment and collaboration of both Desso's suppliers and clients were crucial for the success of its transformation towards sustainability.

**6. Invest in communications and education of clients and suppliers.** Sustainability is still a new concept in the business sector and needs to be explained and promoted through training, mailing, leaflets, sponsorships, etc.

**7. Work with other businesses to create a viable eco-system.** Desso is convincing other sectors and industries to adopt the 'Cradle to Cradle' concept in order to develop a critical mass which will help to spread the sustainability benefits.

**8. Use external environmental consultants with fresh views and original ideas.** Desso developed a strategic partnership with the EPEA consulting company to support its reengineering processes, the design of new products and independent analyses of its materials and suppliers.

### **Eco-innovation – A thorough transformation towards a closed loop system**

**9. Set a two-phase plan with quick wins.** The new 'Cradle to Cradle' product lines, the elimination of expensive pollutants and the better efficiency of the company's basic operations brought fast and positive outputs for the change process. The development of a thorough innovation scheme with long-term targets in terms of energy, waste and water savings then completed the transformation journey.

**10. Embed sustainability into R&D.** The 'Cradle to Cradle' philosophy is based on good product design to have a positive impact on the environment and society. It is therefore crucial to integrate sustainability within all Research and Development processes.





Name	ACCIONA
Sector	Renewable energy; water and infrastructures
Headquarters	Madrid, Spain
Number of employees	33,112
Turnover	6,512 million Euros
Capital	60%, the Entrecanales family, and 40%, Spanish stock exchange
Certifications- Index Group	ISO 14001 – Member of WBCSD – Dow Jones Sustainability Index – Global Compact
Energy policy	Objective 2008 – 2011: Improve energy efficiency ratio by 10%
Waste policy	Increase the amount of paper recycled by 10% and decrease the amount of hazardous waste generated by 10%
Water policy	Improve water consumption efficiency ratio by 10%
Visión	Meet the challenge of sustainable development so that the generations of today and tomorrow will have a better life.

Data: 2009.

Traditionally a construction company, Acciona successfully led a strategic shift towards sustainability. In 2005 the corporation chose to position itself as a leader in the production of renewable energy. This new direction enabled Acciona to become a pioneer in sustainability in Spain. The company now focuses on three main activities: Renewable energy, water and infrastructures. It is present in more than 32 countries around the globe and is making a push for international expansion, primarily in the following markets: Australia, Canada, USA, Mexico, Chile, Brazil, Poland, the United Arab Emirates and India.

### Sustainability-based development

Acciona was created more than a century ago. Today, it is listed in Spain's IBEX 35 blue chip stock exchange index and has more than 33,000 employees worldwide. The company reached a milestone several years ago when it decided to diversify from the construction market and incorporate water services and the production of renewable energy. Acciona's corporate mission became: "To be a leader in the creation, development and management of infrastructure, energy and water, con-

<sup>5</sup> We would like to thank Juan Ramón Silva Ferrada, Sustainability Area General Manager, and Diego Urreta López, Environmental, Quality and Process Coordinator, who kindly shared their experiences with Acciona's change process. Facts, images and data come from Acciona websites and reports.

tributing actively to social wellbeing, sustainable development and the creation of value for our stakeholders.”

Like other businesses engaged with sustainability objectives, Acciona has its own vision of how to meet the challenge of combining sustainable development with financial prosperity. The strategic shift that took place in 2004 enabled the company to meet the latter objective. Indeed, since introducing the production of renewable energy into its activities, Acciona's sales have increased by 13%, reaching 7,208 million Euros in 2008. For the third year in a row, Acciona retained its position as industry leader in the Dow Jones World Sustainability Index (DJSI World), the international benchmark for sustainability and socially-responsible investing.

This was made possible by Acciona's new positioning to attempt to achieve sustainable development through innovation and financial investment. To reach this ambitious objective, the company's Research and Development budget was increased by 82% between 2007 and 2008, with one-third of net profit invested in this area. The revised 2009-2013 R&D and Innovation Strategic Plan envisaged doubling the investment of the previous four years to 400 million Euros.

### **A bit of history**

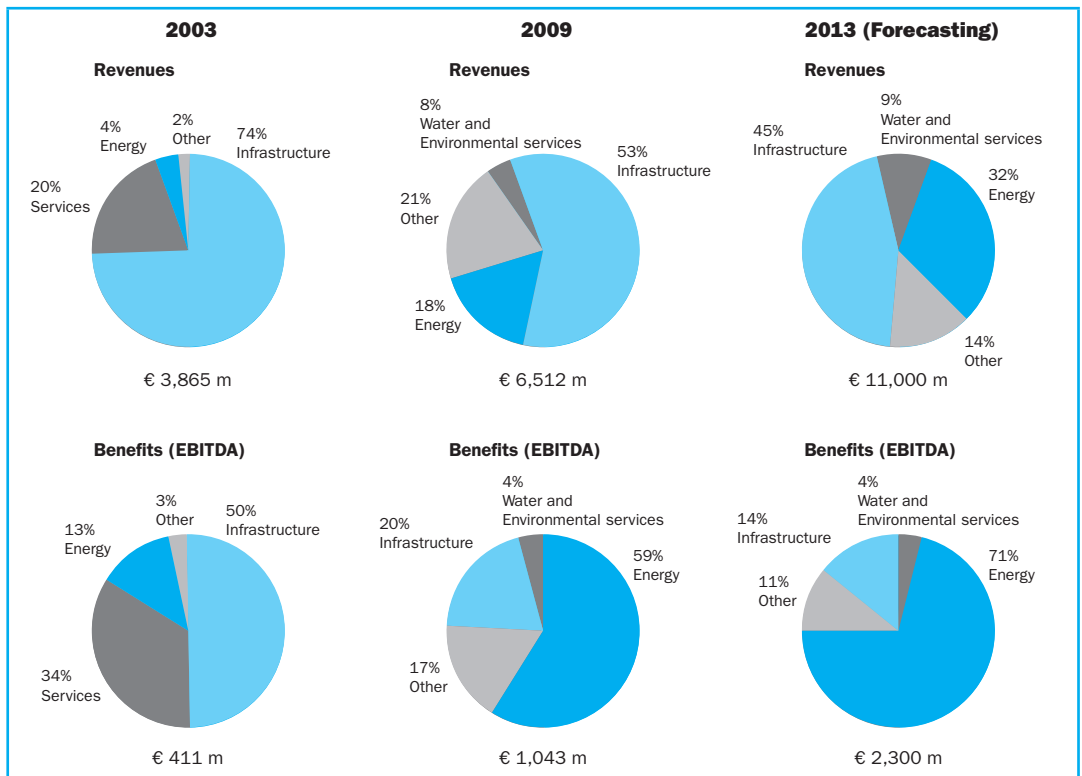
Initially founded as a construction company specialising in civil works, Acciona was created in 1997 as a result of the merger between Entrecanales & Tavora (created in 1931) and Cubiertas & MZOV. This merger was the first and most important in the Spanish construction sector. Acciona started its diversification strategy in the 1980's. In 2004, José Manuel Entrecanales was appointed Chairman, leading the company's transformation based on three strategic pillars:

- A new business strategy based on providing sustainable development solutions to society,
- A focus on the energy, infrastructures and water sectors, and
- A vocation of international expansion.

### **Strategic transformation**

The decision taken in 2004 by the new chairman, José Manuel Entrecanales to move from the very profitable real estate and construction sectors to the incipient renewable and water infrastructure industry was, at that time, quite surprising and risky. In fact, the “traditional” construction sector was securing huge incomes and benefits. Time has shown, however, that this decision was visionary, avoiding the worst consequences of the current financial and Spanish real estate crisis. Juan Ramón Silva Ferrada, Sustainability Area General Manager, emphasises the rational argument, claiming that “sustainability is not philanthropy but the key driver of future business models in a prosperous society.”

## Transformación del modelo financiero de Acciona (2003-2009-2013)



Source: Acciona website.

In 2003, the construction business represented 74% of Acciona's total income and 50% of its profits. Five years later, it accounted for only 52% of total revenues and 20% of benefits. By contrast, the energy business grew from 4% of total income to 18% and from 13% of profits to 59%. In September 2008, Morgan Stanley and Standard & Poors reclassified Acciona as an Electrical Utility.

### Development through acquisitions

Acciona started to invest massively in the renewable energy sector in 2003-2004 through the acquisition of different renewable energy companies:

- EHN, a leading manufacturer of wind generators founded in 1989 and based in Navarre (Spain), was acquired in 2004 for 773 million Euros. It brought around 2,590 MW of installed

wind generators, an assembly plant, 19 mini hydropower stations, a biomass and biodiesel facility and several solar plants.

- The Spanish wind power company, Corporación Eólica (CESA) was purchased in 2006 for 1,370 millions Euros, bringing 536 MW of installed capacity.
- American renewable specialist, ecoEnergy, was acquired the same year, obtaining 1,300 MW of construction rights.
- Finally, in 2009 a bold operation took place with Acciona selling off its 25% stake in Endesa to Enel and the acquisition, at the same time, of 2,078 MW of Endesa's renewable assets.

### **About José Manuel Entrecañales Domecq, Chairman & CEO of Acciona**

Born in Madrid in 1963, José Manuel Entrecañales Domecq is the grandson of José Entrecañales Ibarra, the Basque engineer who founded Entrecañales & Tavora, the construction company at the origin of Acciona. José Manuel Entrecañales obtained an MA in Economics at Madrid's Complutense University after studying at Madrid's *Colegio Estudio*, a school renowned for its openness and innovative academic methodology based on the discovery of and respect for the natural and social environments. He started his career in 1986 as an Associate of Merrill Lynch Europe in London and New York. After serving as CFO at Acciona from 1992 to 2005, he was named Chairman. In 2009, Entrecañales also became the first Spaniard to be appointed to the World Business Council for Sustainable Development's (WBCSD) Executive Committee.

How did Entrecañales and Acciona achieve the shift towards a new strategic direction?

### **Cultural Change: a commitment of top management**

In 2004, at the age of 41, and after 14 years working in different Acciona departments, Jose Manuel Entrecañales Domecq was appointed the new Chairman of Acciona following his father's retirement. He had a clear and strong vision and was convinced that the only way for Acciona to maintain its position as an industry leader over the long term was to steer its strategy and culture towards sustainability. Once this decision was made, the next and critical step was for him to get his team fully committed to achieve deeper and faster transformations. As Juan Ramón Silva Ferrada explains, "We had to rush to implement what the company was saying publically."

### **An internal reorganisation to incorporate the vision of sustainability**

As a result of a thorough self-assessment process aimed at enhancing the company's sustainability performance through benchmarking and audits, two working groups were created: One on Quality and the other on Environment.

Then in 2009 a new area was created to reflect the new strategy in the company's organisational chart: The *General Direction of Innovation & Sustainability*, headed by Chief Innovation & Sustain-



ability Officer, Joaquin Mollinedo, bringing together the areas of Sustainability, Innovation, Quality and R&D, and Regulation.

The same year Acciona's Board of Directors gave the go-ahead to the creation of a Sustainability Committee to guide and supervise policy, objectives and plans in the sustainability and Corporate Social Responsibility areas to evaluate their implementation and to periodically review compliance.

### **The importance of measurement**

*Métrica*, a proprietary tool to gather data and monitor environmental performance, was rolled out across the company in 2008. The data gathered is quantifiable to facilitate the analysis and development of appropriate actions. In 2008, 95% of the company's production centres were directly collecting information through this system. This direct involvement by the production centres has led to more reliable figures and increased employee engagement.

### **Raising awareness among employees**

One of the first steps to implement the new strategy was training the company's executives to understand and apply the sustainability concept. More than 1,800 employees were trained in 2008-2009 through the online course, CRONOS, delivered by Cambridge University in the UK. In 2009, a total of 6,368 environmental training hours were provided at Acciona's headquarters alone. In April 2010, Acciona launched its first MBA in Sustainable Economics to educate future business managers.

Acciona organises annual internal conferences for its top management in an effort to raise awareness and knowledge of the risks and opportunities of sustainability; eminent international environmental experts such as Jeremy Rifkin, Daniel Esty and Rajendra K. Pachauri have taken part as guest speakers in past years.

The company also runs an environmental campaign called "Butterfly" on energy efficiency and water management within the company. An environmental best practice manual has been put together and is constantly reviewed for improvement. It covers traditional areas of action such as the efficient use of lighting, office waste management and the rational use of water. As commented by Diego Urreta, Environmental, Quality and Process Coordinator, "the pressure towards sustainability was so deep that it also affected employees' personal lives, becoming more aware about saving water and energy in their own homes"

Acciona aims now to link salaries to environmental performance. Aware of the complexity of developing such a system, the company is currently exploring different options.

## **Ethical channel**

In 2007, Acciona's Board of Directors approved the company's Code of Conduct, with the aim of providing guidance to its employees through the creation of a corporate culture based on integrity. This approval was followed by the creation of a dedicated Committee and an Ethical Channel, a tool which allows Acciona employees to put forward their queries on the Code or to report possible breaches, all in the strictest confidence.

## **Open Collaboration - Dialogue With Strategic Stakeholders**

Acciona has invested considerable effort in collaboration initiatives, from launching a massive communications campaign on sustainability to taking part in a number of working groups and sponsorship projects.

### **An emphasis on communications**

As highlighted in the introductory section, external communications and engagement with consumers are central to achieving wider societal change. Indeed, there is an understanding that companies have a responsibility to educate consumers on the environmental benefits of their products. This communication should not be "greenwashing" but, rather, fairly transparent.

In 2005, Acciona launched its first large-scale social campaign. It aimed to communicate the brand's new direction and strategic positioning as a pioneer on sustainability issues. The campaign achieved considerable recognition and earned a number of awards. The second campaign, launched in 2009, ran on TV and in print and digital media. It consisted of two parts: The first aimed to prompt a reflection on the existing development model using an intriguing slogan "Re -" to invite the public to enter the website [www.sostenibilidad.com](http://www.sostenibilidad.com). The second phase proposed an analysis of what constitutes sustainable development and the path chosen by Acciona to contribute to it. A study from The Cocktail Analysis consulting company claimed that Acciona's large-scale communications campaign favoured change in consumer behaviour and influenced consumers' contributions to sustainable development. This same study ranked the brand fourth in Spain in terms of its contribution to the development of nationwide awareness of environmental challenges. With this campaign, Acciona used its institutional communications investments to educate society and raise its awareness of today's main environmental challenges, such as climate change, waste, pollution and energy, among others.

### **Stakeholder analysis**

Three years into the development of its new strategy, the company carried out a stakeholder analysis with the help of an external consulting company to identify the major interest groups in its main markets. At the end of 2009, Acciona also launched a brand perception study to assess the perception of a variety of external stakeholders across a number of sectors and activities. The scope of

the study included recognised experts in the field of sustainability. The objective was to build a specific line of behaviour for each group to improve the company's engagement and communication with them. The stakeholders identified include: Suppliers, employees, clients, NGOs and community representatives, governments and public administrations as well as the media. Requesting suppliers to comply with the UN Global Compact Principles was, amongst others, one of the subsequent changes prompted by the findings of the stakeholder analysis.

### **Participation in multi-stakeholder groups**

Acciona participates in various multi-stakeholder groups through the Entorno Foundation, representative in Spain of the World Business Council for Sustainable Development, to reflect on a variety of topics such as energy and climate change, sustainable construction and the wider role of business in society. The energy working group highlights the imperative to reduce emissions in electricity, industry, transport and consumption. As a consequence of this group's work, Acciona and other companies have publicly committed to work towards a low-carbon economy. Similarly, the work of the sustainable construction working group focuses on analysing how the entire supply chain needs to be reworked to become sustainable. The group promotes dialogue between all agents including experts, governments, consumers and pressure groups. Finally, the last business working group discusses ways to transform challenges into opportunities to add sustainable value to society.

Acciona has also created an independent committee of experts which analyses and publically comments on the company's annual sustainability reports. It includes representatives from NGOs and international institutions such as Transparency International, WWF Adena, Spain's *Fundación Ecología y Desarrollo* (Ecology and Development Foundation), the World Bank, Spain's CECU consumer organisation, Social Accountability International and Living Earth Foundation. Their questions, comments and observations are posted on the company's website and published in the final Sustainability Report.

In 2009 Acciona joined the EU Corporate Leaders Group (CLG), an exclusive business leaders' organisation which brings together approximately 30 European companies with the shared task of influencing EU politics with regard to climate change.

### **Strategic Sponsorship**

Acciona supports various events aimed at raising awareness about environmental challenges and opportunities. For instance, the company sponsored a conference in 2007 drawing attention to the challenges posed by carbon emissions. It also sponsored the presentation in Spain of the documentary "An Inconvenient Truth." Finally, in 2009, Acciona set up a foundation, the *Fundación Acciona Microenergía*, to support micro energy generation. This foundation is currently engaged in a project to provide thousands of homes in Cajamarca (Peru) with solar energy kits, using a management model based on microcredit financing.

## Eco-Innovation - Development of green products and services

### Investing in Research and Development

By positioning itself as a leader in renewable energy, Acciona has profoundly transformed its products and services. Acciona set a record in R&D investment in 2009. The company reviewed its R&D Strategic Plan and closed a financing deal with the European Investment Bank. The main features of both were as follows:

- Investment of 92 million Euros in innovation projects, 30% more than in 2008; mainly in energy and infrastructure divisions;
- Implementation of more than 100 research projects grouped into 15 lines of research connected to Acciona's business lines: Nanotechnologies, new sustainable construction material, wind energy technology, hydrogen production technology and water desalination; and
- A total of 377 professionals involved in R&D; managing currently a portfolio of 52 patents.

### Renewable energy development

With zero levels of contamination, wind energy stands today as the most efficient form of alternative energy. In Spain, the first wind farms were built in 1995. Acciona is active in this sector in all areas, from designing turbines to selling the energy produced. It has set up more than 163 wind farms across the world for itself and its clients, generating 4,357 MW. This considerable amount of wind power assets makes Acciona the world leader in the development and installation of wind farms.

Solar energy is another widely recognised clean source of power. Acciona is involved in all technologies in this sector: Concentrated Solar Power (CSP), photovoltaic and thermal. The company owns 97% of the world's largest CSP solar plant in the United States. It is also developing the same technology in Spain.

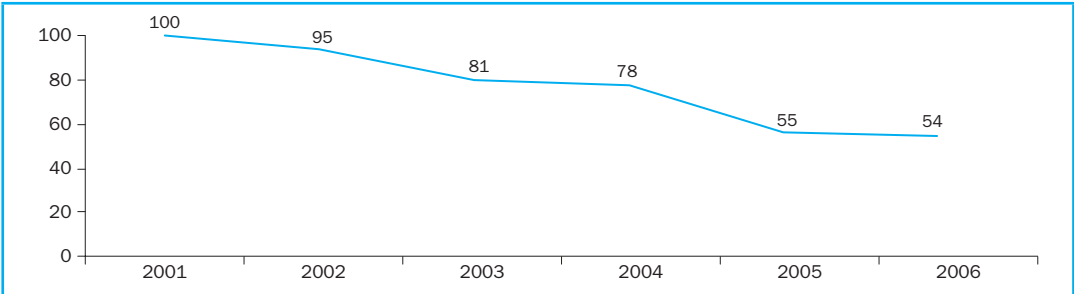
Acciona has also set up three biomass energy facilities, using plant waste as fuel to produce electricity.

### Internal environmental performance

Acciona's Environmental Efficiency Plan is the main tool to coordinate its environmental improvement initiatives, with a view to improving the company's efficiency ratios. The first stage of the Plan (2008-2011) lays down the efficiency measures intended primarily for all of the company's office premises. The second stage will be launched in 2010 (running until 2012) and it will introduce efficiency measures in all Acciona production centres, both at home and abroad. Emissions in 2009 were down 30% from 2008.

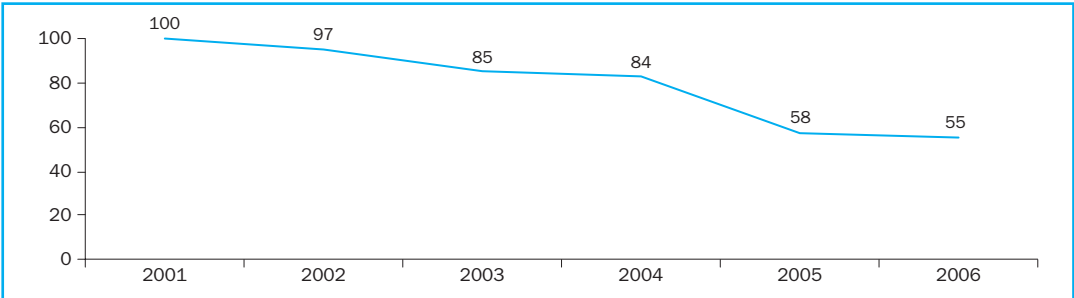
In line with the new policy, environmental data is now carefully gathered and monitored throughout the company. Emissions tracking is closely linked to each sector of the organisation to enable appropriate decisions to be made to reduce the company's carbon footprint. In 2009, energy intensity dipped 46% from 2004, while carbon intensity fell by 44%. Finally, 82% of production was ISO 14001 certified in 2009 (compared to 58% in 2005).

**Energy Intensity Index (TJ/€ turnover)**



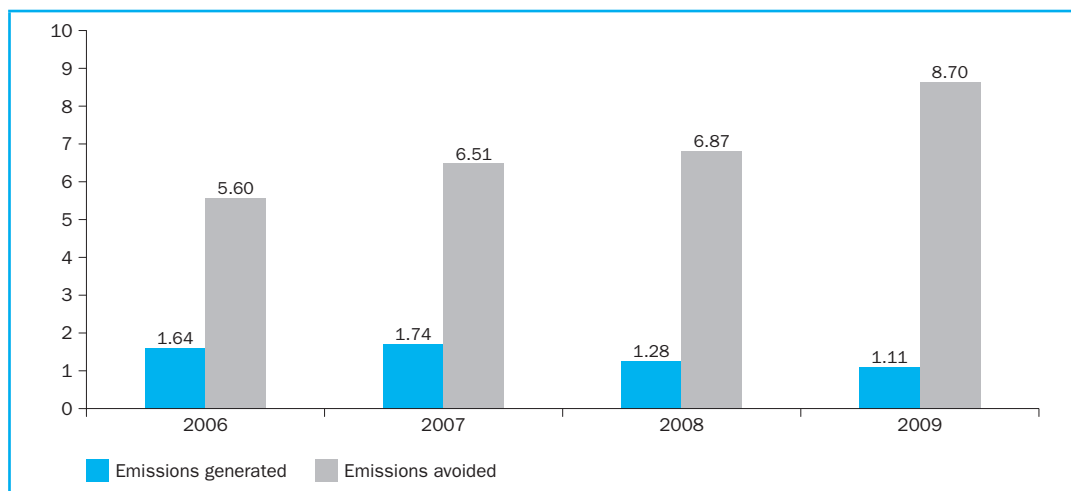
Source: Acciona website.

**Carbon Intensity Index (TCO<sub>2</sub>/€ turnover)**



Source: Acciona website.

### Evolution of Carbon footprint (Millions of tCO<sub>2</sub>)



Source: Acciona website.

### Eco-efficient buildings

Acciona is a pioneer in the construction of eco-efficient buildings which keep energy consumption down to a minimum and which integrate renewable energy sources to provide maximum comfort and habitability. Acciona has built the world's very first zero-emissions building in Pamplona, Spain: Acciona's Solar Energy headquarters. It is fitted with 110 kW of thermal solar panels, 50kW of solar PV, a geothermal installation and a biomass cogeneration unit. It reduces the energy needs to 44% of those of a standard building, the rest being covered by renewable energies and thus saving 129 tones of CO<sub>2</sub> emissions per year.

### Lessons Learned

#### Cultural Change: a commitment of top management

**1. Secure the personal involvement of the top leader(s) towards the new strategy.** The CEO's commitment was essential to involve the entire company in the process of change from a traditional construction company to a pioneer in sustainable development, showing the way to follow for other employees.

**2. Dedicate time and resources to train employees and make them understand the new environmental challenges.** The group launched internal and external communications campaigns, conferences and learning programmes to raise awareness amongst its staff.

**3. Develop employee engagement tools to involve all collaborators in the journey.** The company prepared best practice manuals, online courses and measurement software and it is currently studying linking salaries to environmental performance to assure everybody's commitment at all levels.

#### **Open Collaboration - Dialogue With Strategic Stakeholders**

**4. Get the public at large involved through innovative educational campaigns on environmental issues.** This communications scheme can help build a positive image for society and increase the company's green positioning.

**5. Be open to independent stakeholder reviews.** Feedback from key stakeholders has improved the company's own policies and brought transparency and trust to the change process.

#### **Eco-Innovation - Development of green products and services. To Green Services**

**6. Embed eco-innovation in Research and Development.** The company is currently investing heavily in clean technologies to become the leading provider of sustainable infrastructures for society, drastically reducing its carbon footprint and taking part in the new green economy.

**7. Invest strategically to strengthen the company's positioning.** Carefully chosen business acquisitions have helped the group to start to consolidate its shift to becoming a sustainable energy, water and infrastructures supplier.





# Scandic

Name	SCANDIC HOTELS
<b>Sector</b>	Hotel industry
<b>Headquarters</b>	Stockholm, Sweden
<b>Number of employees</b>	6,496
<b>Number of hotels</b>	138
<b>Turnover</b>	€661 Millions Euros
<b>Capital</b>	Onwed by EQT, a private equity fund based in Sweden
<b>Present in</b>	Sweden, Denmark, Finland, Norway, Estonia, Lithuania, Germany, the Netherlands, Belgium and Poland.
<b>Certifications</b>	Nordic Swan or EU flower
<b>Energy policy</b>	100% renewable energy in Sweden with the objective of extending this to all countries where the hotel chain operates.
<b>Waste policy</b>	Minimise the use of plastic from fossil fuels in both infrastructures and consumption.
<b>Carbon policy</b>	Carbon emissions have decreased by 72% since 1996, and the objective is to become carbon neutral by 2025.
<b>Water policy</b>	No bottled water is sold at the hotels; use efficient taps and low flush toilets.
<b>Vision</b>	Creating value by being the place and inspiration for conscious people in a better world.

Data: 2009.

## The story thus far

Created by Exxon in 1963 as a motel chain, Scandic rapidly became the largest Swedish hotel company and expanded across Scandinavia. Badly affected by the Gulf War and the escalating oil prices, the chain suffered three years of consecutive losses. To turn the company around, a new management team was hired in 1994. They soon realised that, with all the other chains improving the quality of their facilities and rooms, quality alone would not be sufficient to differentiate themselves. A better way to gain competitive advantage, they decided, would be to create values that guests could engage with and that employees could use as a guide to carry out their tasks. They contracted the newly created “Natural Step”<sup>7</sup> group to guide them through the process of incorporating sustainable values. The idea was that “no company can avoid taking responsibility for the environment.” The changes in strategy survived the change of

<sup>6</sup> We would like to thank Inger Mattson, Manager of Sustainable Business, who kindly shared with us her experience in Scandic's change process.

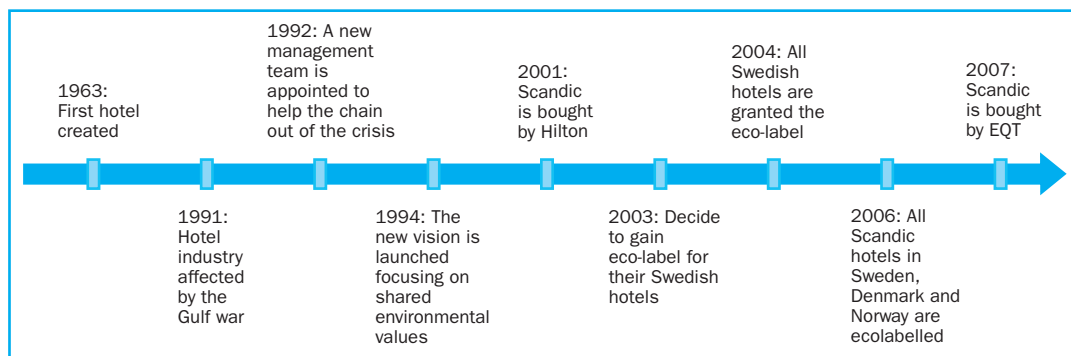
<sup>7</sup> For more information on the Natural Step concept and methodology, please refer to the section called “Culture” in the Introduction of this paper.

ownership and continued to be a strong part of the company's identity after it was successively bought out by Hilton in 2001 and then by EQT in 2007.

Fifteen years later, Scandic has gained significant competitive advantage due to its environmental positioning:

- It has built a company culture by **synergising values**. In 1994, the new management team developed the brand around a vision of sustainability. This positive view of the future enabled the chain to find common principles to harmonise the work of all its employees and to clarify the brand's values.
- It has developed a clear **marketing position**. One of the first hotels chain to actively start working on the triple bottom line, Scandic created a real competitive advantage and built a reputation by positioning itself as a "green" chain. It is difficult to measure how much this positioning has influenced client choice. Some customers are truly committed and manifest their identification with the brand's environmental values; the majority, however, do not voice their interest in environmental policies. The company's real marketing position has been gained through corporate clients. In fact, their interest in Scandic's environmental strategy has certainly grown over the last few years as their own environmental travel policies have been developed. They now systematically check hotel performance in this area before signing contracts.
- Scandic has drastically improved its **carbon footprint**. It is now a very popular concept. In 1996, however, it was much less well-known. Nevertheless, in 1996, Scandic started calculating its footprint with the objective of decreasing its fossil emissions. And it did just that with a 72% decrease in CO<sub>2</sub> emissions per guest and night in 13 years.
- It has **added significant value** to the company. In fact, both Hilton and EQT's interest in the Scandic chain was reinforced by its environmental positioning. They were convinced that it offered a competitive advantage and both companies worked to keep the chain's culture of sustainability very much alive.

### Scandic Hotels Roadmap



Source: Scandic website.

## Cultural Change – A bold vision transformed into a living culture

8 Refer to the introductory section on The Natural Step.

A complex social construction, organisational culture is difficult to assess and impossible to measure. Scandic's Manager of Sustainable Business believes that "environmental sustainability is deep into the soul of the company and creates a lot of pride amongst the employees."

A story and a symbol illustrate the integration of environmental values within Scandic. A number of employees who joined the chain straight after university left their positions to join other hotel companies. They subsequently came back, realising how much Scandic's culture of caring for the environment was both important to them and not matched by the other organisation's cultures.

At the symbolic level, "Om tanke" is a Swedish expression used extensively within Scandic. It means *care and consideration* and, when employed by members of the Scandinavian hotel chain, it refers to the environment and guests. It alludes to the notion that their goal is to grow whilst, at the same time, respecting the people and the environment that enable them to do so.

How have Scandic's employees been engaged during the change journey? What have been the most significant steps fostering a culture dedicated to caring for the environment?

### Building a "green" culture through a guiding vision

*A visionary strategy ...*

In 1994, the new management team launched a visionary statement declaring that:

"no company can avoid taking responsibility for the environment and focusing on environmental issues; Scandic shall, therefore, lead the way and work continuously to promote both a reduction in our environmental impact and a better environment; Scandic shall contribute to a sustainable society."

The direction was set. Between February and April, members of the Executive Committee attended a Natural Step training session which gave them an insight on the four scientific conditions for a sustainable society.<sup>8</sup> This vision, combined with an understanding of global envi-

ronmental challenges and leverage points for change, led to the launch of a four-part programme: First, integrating environmental priorities in decision-making; second, improving resource efficiency; phasing out harmful materials; and, lastly, sharing knowledge with employees, suppliers and customers throughout the process.<sup>9</sup>

<sup>9</sup> TNS case study.

<sup>10</sup> See The Natural Step case study.

In 2009, the company's vision evolved but it was and still is very much concerned with having a positive environmental impact. More specifically, it is measurable and certainly more ambitious than the 1994 vision. The company's current goal is to

“create value by being the place of inspiration for conscious people in a better world; reaching a 100% CO<sub>2</sub> reduction by 2025, even if this includes influencing other stakeholders, among them district heating companies. If you lead the way and take responsibility, you earn credibility and all stakeholders are winners, the energy industry, us, our guests and the planet.”

*... developed in a participative way*

The company's first environmental vision and strategy were developed in 1994 by the management team after engaging with stakeholders and analysing their concerns. Employees were key participants. They were all engaged in the process through a company-wide dialogue. Each team in each hotel met to discuss the new vision and exchange ideas regarding actions that could be taken to improve the hotel's performance locally or at the chain level. An “environmental networker” was selected in each hotel to facilitate the process and share lessons learned with other departments. A year and a half after the launch of the vision, 1,500 actions were implemented involving 64% of employees.<sup>10</sup> This process was particularly helpful in the creation of new principles as it gave all employees a say in the matter, recognising their value whilst, at the same time, ensuring they understood the new strategic direction.

### **Maintaining the momentum through engagement and training**

Whilst it is difficult to engage employees with a new strategic direction, it is also complex to maintain momentum in the same direction over the years. Training and continuous engagement with employees have helped Scandic keep its environmental performance as an important part of its internal standards. The Swan certification also ensures that employees are briefed on the company's environmental concerns when joining the

firm, that they are informed regularly about the company's environmental performance and that they are continuously trained on general environmental issues and on issues related to their specific areas of work.

In 1994, all employees were trained by The Natural Step. Environmental training is now part of every employee's integration process. A further training programme designed to provide a global understanding of environmental issues, challenges and stakes is also available on the company Intranet. Furthermore, each team and department is responsible for training its own team members on the environment so that they gain more targeted knowledge.

Monitoring environmental performance and integrating environmental targets and procedures in each team is another way to engage staff members. Every month, a meeting is held in each hotel where the management team discusses performance and, in particular, environmental performance. There is also a self-audit tool available on the Intranet that every hotel manager must complete to check if they fulfil Scandic's standards including those referring to environmental sustainability. Finally, there is at least one meeting a year in each hotel to discuss overall hotel performance, and it always includes performance about the environment.

### **Overcoming resistance through integration**

To ensure that environmental considerations remain mainstream, responsibilities and standards are integrated within different technical areas and at several hierarchical levels.

The Manager of Sustainable Business is responsible for "providing information and inspiration around sustainability (both environmental and social) and to coordinate the work around sustainability for the entire chain." Whilst this Manager reports to the Director of Human Resources, she works directly with the environmental coordinators who have different levels of technical expertise. There is one coordinator in each of the 138 hotels. The coordinators volunteer to be in charge of environmental issues in addition to their respective tasks. They are responsible for setting environmental targets for their specific hotels, maintaining a flow of information around environmental issues, ensuring that environmental measures are met and, finally, serving as inspiration for others within the hotel and identifying potential sources of innovation. To ensure cohesion within countries, three managers supervise the coordinators in the largest countries of operation: One in Norway (13 hotels), one in Denmark (23 hotels) and one in Finland (20 hotels). These three Country Managers are part of the respective countries' management teams and also hold other technical functions.

Scandic is very centralised to ensure coherence between the hotels, with specific manuals to help guide employees with their daily tasks. All these manuals contain a section on the environment. In addition, all environmental coordinators also have technical responsibilities to help integrate environmental considerations within the different departments and not relegate these tasks to a single part within the organisation.

## **Open Collaboration - Influencing the supply chain and direct stakeholders**

### **Extending sustainability targets to suppliers**

Certainly the most impressive aspect of Scandic's collaborative work is having successfully encouraged its suppliers to improve their own environmental performance. Scandic's Supplier Agreement is preceded by a Declaration through which the supplier commits to work towards The Natural Step's four-system conditions. The agreement also asks companies to set measurable targets and encourages them to think about internal training and communications on sustainability issues.

In the beginning, suppliers were surprised by these requirements; they were not sure how to deal with Scandic's new standards. Over the years, influenced by the bargaining power of the company, most of them have made the effort to change their systems and behaviour to maintain their commercial ties with the hotel chain. For Scandic's Manager of Sustainable Business, "what we have achieved is a real understanding and commitment from our suppliers so if we go back to them and ask their support or help on an issue, they are prepared and very willing to do it and I am often surprised at how offensive they are."

The relationship between Scandic and its principal detergent provider provides an illustration of the level of commitment reached. The chemical company has set targets to ensure that the level of non-ecological detergent bought by Scandic does not reach a certain level. If it does, the company alerts Scandic immediately. In traditional commercial terms, this measure makes little sense. Why would a company set itself targets to freeze or even decrease its sales? However, understanding the strategic environmental shift within the hotel has enabled this supplier to keep this particular client.

### **Influencing building owners**

Scandic hotels are managed in operations only which means that the buildings in which they are housed do not belong to the company. As a result, the hotel chain has little direct power, in principle, to choose the material used outside the bedroom furnishings. However, in practice, a lot is done to influence the building owners' decisions, maintaining constant conversations and negotiations with them. Conflicts of interest are frequent. For example, though an energy efficiency measure may benefit Scandic and reduce the costs of its operation, it may also increase building investments. A middle ground is often found in which Scandic accepts to pay higher rent for a more energy efficient investment.

### **A long-term partnership with The Natural Step**

The partnership between The Natural Step and Scandic hotels played a major role in shaping the hotel chain's vision in the early 1990's. The Natural Step provided a scientific understanding of

what could constitute a sustainable society through its four-system conditions training. Equipped with a certain level of knowledge of the “bigger picture”, Scandic’s management team was thus more likely to identify leverage points of action within their context. The Natural Step also accompanied the hotel chain in the implementation process. In particular, it provided widespread training to all 6,000 employees.

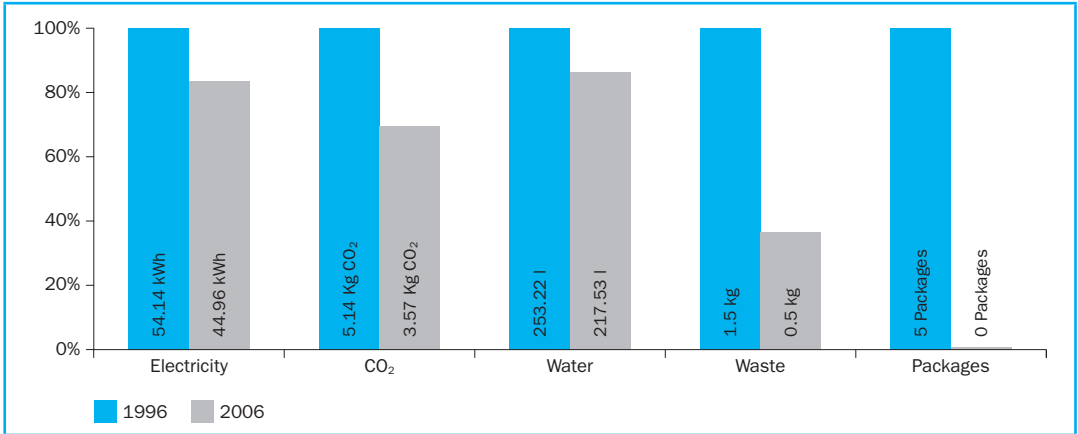
**11** For a list of all actions, please visit Scandic’s website: <http://www.scandichotels.com/betterworld>

Today, The Natural Step conditions are still the core basis behind Scandic’s work on sustainability. “The Natural Step today is more like a friend than a partner, we share experiences; their spirit is in the company.”

**Eco-Innovation - Green labelling and eco-rooms**

The series of actions and steps taken by Scandic hotels to reduce their environmental footprint<sup>11</sup> has clearly taken them in the right direction. The figure below compares the level of consumption per night and guest and demonstrates a clear improvement between 1996 and 2006.

**Comparative consumption table per night and guest**



Source: Scandic website.

**Swan: Eco-labelled hotels**

All Scandic hotels in Sweden are SWAN certified. The company’s hotels are required to work towards the Swan certification in Scandinavia and towards the EU Flower certification in the rest of Europe. Through on-site inspections, both certifications recognise the hotels’ respect for a com-

prehensive range of standards including performance in the areas of energy, operations and maintenance, hotel premises & purchased products, hotel rooms, kitchen & dining, cleaning & laundering, and waste & transport. Mandatory requirements include, for instance, the use of timers for outdoor lighting, an orientation programme for new employees on the environment within their first 30 days, the non-use of disposable items in the kitchen and a ban on particularly harmful chemicals.

### **Buildings going green: The eco-room**

Because the core of Scandic's services relies on the rooms it provides to its guests, a guide has been developed to ensure that environmental standards are respected when refurbishing or building new rooms. SEREC (the Scandic Environmental Refurbishment Equipment and Construction Standards) defines three lists of materials: Those which have to be banned, those which are acceptable and those which are recommended. This list has been developed based on The Natural Step conditions. A wider approach is currently being developed, though not only looking at materials but also lifecycles: Where materials come from, how long they last and what happens to them when they leave the hotel.

### **Measuring performance**

The Sustainability Indicator Reporting tool is used in each hotel to prepare monthly reports on resource consumption, specifically in terms of water, waste, laundry detergent, chemicals, vehicles, etc. It enables Scandic to keep constant track of its environmental performance. This tool automatically uploads data to a section on the website which provides this information to the public and ensures transparency.

### **Lessons Learned**

#### **Cultural Change – A bold vision transformed into a living culture**

**1. Put culture at the centre of the change process.** Culture is crucial to transform in favour of environmental sustainability and to maintain the momentum with all employees. This is probably even harder in the service industry where operations rely on employees' beliefs and willingness to incorporate new values.

**2. Engage with employees from the beginning with basic steps.** The company engaged people before deciding what was needed and planned few actions at the start. It then evaluated its footprint and developed its plans to reduce its emissions. Scandic's dialogues with its employees were central to trigger the generation of new ideas and ensure a good understanding of the company's new direction.

**3. Develop training programmes and staff empowerment.** Scandic launched a large training event



at the start of the strategy process to educate all its staff followed by orientation programmes for new employees and ongoing training for all others.

**4. Ensure the integration of sustainability throughout the company structure.** At Scandic, change agents, called “sustainability champions,” are key to maintaining the momentum and mainstreaming environmental actions across the organisation.

### **Open Collaboration - Influencing the supply chain and direct stakeholders**

**5. Use bargaining power to influence the supply chain.** Suppliers and customers represent a core part of the opportunities for success. Good practices in procurement policies can make the change process significantly easier.

**6. Work with and lobby other strategic business partners.** Scandic works continuously with building owners to influence their decisions. They lobby them to make the most environmentally-friendly decisions.

**7. Partner with external environmental organisations.** Scandic has maintained a strategic collaborative agreement with a specialised environmental NGO since the beginning of the process to set up the strategy and raise awareness among its stakeholders.

### **Eco-Innovation - Green labelling and eco-rooms**

**8. Get green certifications for innovative products.** External certifications of Scandic’s sustainable services serve to consolidate its competitive advantage through green marketing, transparency and instilling trust among its customers.

**9. Measure the company’s footprint, develop performance indicators and communicate progress.** The company permanently monitors its environmental impact, indicates its short and long-term goals and informs about its progress.





Name	HAVAS
Sector	Advertising and communication services
Headquarters	Paris, France
Capital	Bollore group (France, 33%), Rodes group (Spain, 2%), stock exchange (France, 65%)
Number of employees	14,400
Turnover	€1,441 million
Present in	More than 100 countries
Member of	Global Compact, World Business Council for Sustainable Development , Tck Tck Tck Campaign (Time for Climate Justice)
Carbon policy	Commitment to reduce the carbon emission of 10% between 2010 and 2015
Visión	Influence consumer behavior to address major issues facing the world

Data from Annual Report 2009.

Havas is the seventh communications group in the world structured around two business units: Havas Media and Havas Worldwide. The incorporation of sustainability concepts has just started within the group. Several strategies are currently being studied to determine how to best integrate the triple bottom line approach within the services the company offers its clients. 2010 will be a key year in shaping this direction. Though the roadmap is not yet finalised, Havas has already identified and taken many steps. They deserve a closer look.

### A challenge for the communications industry

Clearly, advertising groups are ideally positioned to observe and analyse emerging consumption trends. Havas Media Intelligence recognises that contemporary societies are increasingly concerned about their long-term capacity to sustain themselves. In parallel, consumers appear to trust large corporations less. Merging these two findings has led Havas to identify a real opportunity to use sustainability “as the foundation stone upon which to rebuild trust with consumers and a wider stakeholder group.”<sup>13</sup>

In fact, NGOs, think-tanks and consumer groups are increasingly scrutinising marketing campaigns that use sustainability messages. For

<sup>12</sup> We would like to thank Anne Courtois-Degorce, Director of Sustainable Business, and Guy Champriss, Director of Global Business Insights, who kindly shared with us their experiences during Havas' change process. Facts, images and data were obtained from Havas websites and reports.

<sup>13</sup> *Sustainable Futures*, Havas.

instance, in France, an independent advertising observatory<sup>14</sup> has been created by an alliance of NGOs to inspect publicity promoting “green” attributes of different products, services or companies. The observatory uses its website to broadcast images and videos that they consider abusive. They also prepare an annual public report to alert consumers on advertisement using messages considered to be “greenwashing.”<sup>15</sup>

<sup>14</sup> <http://observatoirede-lapublicite.fr/>

<sup>15</sup> The term, “greenwashing”, is broadly used to identify advertising practices which seem to be environmentally virtuous but, in fact, provide false or partially true or irrelevant information on the nature of the product, service or company.

<sup>16</sup> *Sustainable Futures*, Havas.

In this context, an internal survey was launched amongst Havas’ agency directors who recognised the need to advise their clients on how to use sustainability messages. Fernando Rodès, Havas CEO, emphasises the group’s “commitment to helping our clients understand and leverage the opportunities from more sustainable practices.”<sup>16</sup> With that commitment recognised, the next questions are necessarily, what kind of advice should they give other companies and how will the group integrate this new accountability internally?

## Greening ads

Environmental and social sustainability have only recently started to be considered within the marketing and communications sectors. According to Anne Courtois-Degorce, Director of Sustainable Business at Havas, it is one of the last sectors to join global conversations on the topic. As a result, there is little clarity around what constitutes the successful integration of sustainability within advertising campaigns, for instance. Is there a need for more factual transparency or for fewer, more targeted environmental messages? Which change model should be encouraged? For Anne Courtois-Degorce, the question is really about transforming the way the sector works: First, screening for and preventing negative messages and, more importantly, encouraging the use of more positive messages. It is about managing the paradox of marketing more consumer goods in a finite planet. And it is about transforming the mainstream paradigm which is still centred on principles of self-satisfaction and impulsive needs.

## Cultural Change – Overcoming resistance to lead the sector

There is a consensus at Havas that cultural change is the necessary central element to successfully integrate sustainability concerns. In fact, people are the group’s central asset. So what is the strategy to transform internal behaviour and paradigms?

## Commitment from senior management

**17** Havas Communication on Progress for Global Compact (COP).

At the top of the company, Fernando Rodès, Havas CEO, has publicly stated his commitment to sustainability. His ambition is to “lead and set more ambitious goals for the whole sector (...). To be responsible for us means that our communication campaigns have a benefit impact on human beings and offer more choice and possibilities to consumers.” Fernando Rodès believes that sustainability is “more than just a trend” and advocates the need for strategic corporate shifts which he sees as necessary for companies to survive over the long run.<sup>17</sup>

Therefore, at the beginning of 2009, the group began implementing an action plan aimed at transforming cultural values. The first step was the creation of the Director of Sustainable Business position in April 2009 based out of the company’s headquarters in Paris. This position is responsible for coordinating all sustainability initiatives and fomenting cultural change. This will be done through the implementation of an internal “network of champions.” These champions were identified and the group was scheduled to begin to work in 2010. Activities will consist of training programmes and the establishment of a management information system with progress indicators.

To strengthen the integration of the new vision, further proposals are currently being studied. Potential directions include the creation of an international group whose task is to build expertise, prepare case studies and train a panel of experts to guide decision-making.

## A challenging cultural integration

There are several obstacles to the integration of sustainability within Havas’ culture. First, the flat nature of the structure which has, thus far, been an undeniable asset for the company, enabling it to adapt to local contexts, will make it difficult to impose a corporate vision of sustainability. The challenge will be to integrate new concepts without burdening local agencies (14,400 employees in more than 100 countries). Secondly, the notion of social and environmental sustainability is quite far from the traditional common paradigms shared amongst publicists. Notions of self-satisfaction and impulsive buys are not aligned with promoting the responsible use of natural resources. Finally, there seems to be a general fear of addressing these issues, questioning whether advertising experts should really engage in conversations based on the ecology and the environment. Guy Champaniss, Director of Global Business In-

sights, believes there is a need to build a wider acceptance of the fact that environmental sustainability is an emerging issue requiring experimentation and not only in-depth expertise.

## Engaging, training and monitoring

In 2008, the Havas Group started to train its employees and encourage them to be more virtuous environmentally, both in their professional and personal environments. In the workplace, the company particularly encouraged using public transportation or carpooling for commuters, using video conferencing technology whenever possible instead of air travel, duplex printing and the increased use of servers developed by IT Departments, switching off computer workstations and printers at night.

## Open Collaboration – An alliance with and beyond the industry

At Havas, partnerships are developed locally with national institutions. The possible creation of an international panel of experts is the first global collaboration on the sustainability issue at Havas. However, it seems that the central element is really the relationship between the agencies and the advertisers.

## Developing and sharing tools together with the whole supply chain

In the *eco-publicité* project earlier, Havas collaborated with different partners such as ADEME (the French agency promoting energy savings), the luxury group LVMH and consulting company PricewaterhouseCoopers to develop one of the first tools to measure advertising campaigns' environmental performance. Available free of charge on internet, this tool analyses the campaign's lifecycle, taking into account indicators such as energy, water, waste and emissions.

### Screenshot from the *eco-publicité* web tool



Source: [www.ecopublicite.com](http://www.ecopublicite.com)

Originally, the project was launched after the meeting between several complementary players in the communication industry's entire supply chain. Havas Media France, as a service provider, was considering ways to advise its customers regarding these sustainability issues. ADEME, as a French public body focused on environmental awareness, was interested in a precise tool to measure campaign impacts. LVMH, a major advertiser, wanted to understand the ecological footprint of its communications. Finally, PwC, through one of its company specialists in Lifecycle Analyses, was able to provide the technical solutions. The shared interest in sustainable development issues and a true complementariness of skills and experience created the necessary atmosphere of understanding for such a sensitive topic.

### **Taking part in local and international committees**

Havas also participates with different initiatives at the local and international levels. For example, it is a member of ORSE, the Observatory for Corporate Social Responsibility, a French network designed to study and promote socially responsible investment (SRI), corporate social responsibility as well as all sustainable development-related issues.

At the global level, Havas is member of the World Business Council for Sustainable Development (WBCSD), a CEO-led, global association of approximately 200 companies dealing exclusively with business and sustainable development. The WBCSD provides a platform for companies to explore sustainable development, share their knowledge, experience and best practices, and to advocate business positions on these issues in a variety of public and private forums. Havas was also heavily involved in the global campaign TckTckTck to raise awareness and lobby the international community in order to reach an ambitious, fair and binding carbon reduction commitment during the Copenhagen summit in 2009.

### **Eco-Innovation – From mitigating environmental impact to eco-intelligence**

What needs to be changed in Havas internal operations? Havas is applying the traditional approach of “green efficiency,” mitigating the environmental impact of running an office. In parallel, in its attempt to lead the paradigm shift in the sector, Havas is currently investigating how more systemic, sector-wide change can be encouraged by integrating sustainability issues within the services offered its clients.

### **Mitigating its direct impact**

Traditional environmental audits analyse how the company's direct impact can be mitigated. Whilst visible impacts can be significant in manufacturing industries, service industries generally look at managing their carbon footprint through transport schemes, waste management systems and improved supply chain management. Havas is doing just that with its threefold commitment:

- Carrying on with the carbon footprint scheme implemented in 2008, aiming to decrease its impact by improving transport and energy consumption policies;
- Reducing the use of natural resources and paper, in particular; and
- Reducing waste and increasing recycling.

**18** Havas group's 2009 Commitments & CO<sub>2</sub> Assessment

**19** Recommendations for green communication planning, Catalyst, Havas Media.

In 2009 an external group carried out a complete assessment of total CO<sub>2</sub> emissions amongst all Havas agencies (direct and indirect emissions – excluding communication campaigns). In 2008, emissions reached 132,000 tonnes of CO<sub>2</sub>, with an average of 9t per employee (from 6t in France up to 14t in the USA). The target is now to decrease this figure 10% by 2015.<sup>18</sup>

Whilst this approach is a satisfactory first step, it does not trigger sustainable innovation.

### Developing sustainable products and services

Whilst the discussions on environmental issues have only just begun and decisions on how to integrate sustainability concepts have not been made, some initiatives have already been implemented, giving a hint of their potential development in operations.

- **10 Commandments<sup>19</sup> – a charter to guide green communications**

This charter recognises that, in the very complex context of environmental sustainability (a concept which has not even been consensually defined), there is a need for guidance on and clarity of green messages. With this document, Havas provides 10 directives to channel green communications. The group recommends refraining from the temptation of depicting a brand as a “green hero,” in other words, avoiding *greenwashing*. It also emphasises the need to engage with broader stakeholder groups, not merely the end consumers. It advises that issues such as climate change and environmental degradation should be looked at positively, highlighting the opportunities for change.

- **Eco-publicité: A platform to monitor ads' environmental impacts**

As mentioned earlier, “Eco-advertising” is a tool developed in collaboration between Havas Media, Ademe and PricewaterhouseCoopers which seeks to measure the environmental performance of a given advertisement campaign. The objective is to analyse its entire lifecycle, taking into consideration key indicators such as the use of energy, water, waste and emissions generated.



- **“Sustainable Future 09”: A consumer study to develop sustainable strategy**

Havas Media Intelligence believes that the real strength of a company will not only be based on the efficiency of its sustainability strategies but also on its ability to translate these efforts into long-term brand equity. To test this assumption and create a business case for sustainability, Havas Media Intelligence commissioned a consumer study spanning 9 countries and studying 8 industries in each country. An indicator was developed, the *Sustainable Futures Quotient*, measuring not only a brand's environmental and social performance but also the contribution of this performance to brand equity.

The results of the study are used to demonstrate to clients the need to integrate sustainability concerns. In fact, the study found that 80% of consumers value responsible companies positively and think that businesses should engage with sustainability issues. 48% of consumers say that they would accept to pay a premium for a more responsible product though 68% see claims by companies as untrustworthy and consider them as mere marketing ploys. The study provides evidence of the need to offer “compelling, authentic and materially relevant” messages in this area to restore consumer trust.

## Lessons Learned

### Cultural Change – Overcoming resistance to achieve sector leadership

**1. Invest heavily in transforming the company's values and mindset.** As culture is fundamental in the service industry, Havas identified the champions and retractors of the change, creating a network to convince all of them.

**2. Secure the involvement of the leader(s) that inspire others to follow.** Havas' CEO clearly advocated the transformation of the group towards sustainability. Other top executives are also leading public initiatives to promote the new culture.

### Open Collaboration – An alliance with and beyond the industry

**3. Strengthen relations with strategic industry partners.** The company involved its main stakeholders such as public bodies, suppliers and clients to engage the whole sector in a systematic change towards.

### Eco-Innovation – From mitigating environmental impact to eco-intelligence

**4. Implement measures which will provide quick wins.** The carbon footprint analysis directly presents concrete data with which to engage. Water, paper and waste use are in the process to be measured and reduced through public commitment.

**5. Develop eco-innovative products and services.** Havas has broadened its business model, incorporating new sustainable studies, methodologies and assessment tools.



## Final conclusions and recommendations

The initial object of this study was to analyse how companies change to incorporate environmental sustainability concerns in their policies. We were particularly interested in how the change process itself was managed. How do businesses start to transform once they have made the decision to work towards environmental sustainability?

The initial review of literature suggested that three axes were of particular interest when adapting a company's activities to environmental challenges: Culture, collaboration and eco-innovation. The analysis of the four selected case studies confirmed the importance of these elements. Whilst we can extract lessons and provisional recommendations from the study of the literature and the four companies analysed, we understand that these recommendations have not been quantitatively tested. The four companies have all made a strategic change to incorporate environmental sustainability internally. We deliberately chose businesses from different sectors and different locations to broaden the wealth of the lessons learned.

### Cultural Change – Embed sustainability into the company's DNA

The literature review in the first part of this study suggested that four main measures were central to changing the culture of an organisation: Designing a vision, expanding communications during the change process, developing training programmes to empower employees, and, finally, ensuring integration through leadership.

Have all or some of these elements been applied by the four companies studied?

It is important to note that all of our four case studies have considered organisational culture during their respective transformation processes. Whilst culture might not be the first element coming to mind when thinking about sustainability and adapting to environmental challenges, it appears as one of the keys for a successful change process for sustainability as well as one of the areas in which most difficulties arise.

Our analysis of the change at Scandic and Havas suggests that culture is absolutely central to transform service-oriented companies towards environmental sustainability. After 15 years of efforts to make the business 'greener', Scandic Hotels found that the hardest task was actually maintaining the momentum of change with all 6,600 employees. In fact, whilst policies and procedures can be written to accompany employees in their tasks, operations in a service industry rely on employees' beliefs and willingness to incorporate new values. At Havas, internal resistance to change and the willingness to maintain more 'traditional' conceptions of communications and advertising are a serious threat to the success of the company's 'green venture'.

Combining our initial model of cultural change and the study of Scandic, Desso, Havas and Acciona, four ways to transform organisational culture can be highlighted as particularly relevant.

## **1. Design a disruptive, positive and ambitious vision.**

The four companies studied have developed a series of aims, goals and objectives in the sustainability area. In some cases, this ambitious and positive vision was developed with help from external consultants and supported by scientific methodologies.

Coming from a situation of crisis, Desso chose to use the 'Cradle to Cradle' philosophy and methodology to support its vision. Critical to the success of the company's strategy was the bold and ambitious vision of transforming the whole company to become 100% 'Cradle to Cradle' certified. This decision implied making heavy investments, thinking long-term and making a strong commitment to implement the necessary changes towards sustainability.

Scandic chose to design its vision of sustainability in collaboration with its employees. Engaging all its staff from the beginning of the process made them aware of the challenges at stake as well as the opportunities that the new direction represented. Organising dialogues with employees was also fundamental to generate ideas that were closer to the reality of the company.

For both Desso and Scandic, working in collaboration with external consultancy firms (Cradle to EPEA and The Natural Step, respectively) ensured that their ambitions were aligned with the environmental challenges and wider ecological issues that their industries faced.

In contrast, both Havas and Acciona developed their green vision as a pro-active strategy to anticipate the disruptive change perceived for their sector (the rise in consumers' environmental expectations for Havas and the real estate crisis for Acciona). This strategy has also allowed them to differentiate themselves drastically from their competitors, diversify into new growing markets and mobilise their employees to reach new goals.

## **2. Engage and empower employees and partners.**

The four companies have created specific materials to engage and/or empower their employees with respect to change processes. Acciona created best practice manuals, online courses and measurement software. Scandic developed a large training event at the launch of the strategy followed by automatic orientation programmes for new employees and ongoing training for others. Havas is looking at developing a three-step plan aimed at engaging, training and mentoring its employees. Desso measures team performance in relation with Cradle to Cradle objectives.

It seems that, whilst it is important to educate employees during the change process, this training should also be part of the orientation process for new hires and reinforced and updated regularly when the company is back to 'business as usual'.

The introduction of Key Performance Indicators to evaluate employee and department performance is starting to be used to align the company's vision with the staff's individual behaviour.

### **3. Secure the leader and top executive's endorsement and commitment.**

Whilst true for all major change processes, counting on the leaders' endorsement seems particularly crucial for the success of an environmental sustainability strategy. In fact, the ideological perceptions surrounding environmental concerns are so personal and so linked to values and beliefs that only by exercising leadership can one convince organisations regarding the need to change and to inspire employees to follow their direction.

Acciona, Desso and Havas' CEOs have all used their charisma and personal power to foster the integration of environmental sustainability in their companies' strategies. They actually took personal risks as substantial shareholders in the companies they lead. This is the definitive proof of their profound and irreversible commitment to sustainability in the eyes of the other shareholders, staff and society.

Another unusual aspect in this change management is that these visionary leaders didn't actually have specific knowledge about environmental sustainability at the beginning of the process. They learned about it from readings, conferences, training programmes or meetings with environmental experts. They understood that sustainability was essential for the future of their businesses and took the risk to use their company as a laboratory to implement *ad hoc* strategies and lead the change.

### **4. Maintain new values alive throughout the organizational structure.**

With more than 15 years' experience in sustainability, Scandic is a company which can provide the longest insight on the change process towards sustainability. At Scandic, change agents (called "sustainability champions" internally) are key to maintaining the momentum and mainstreaming environmental actions across the organisation. They all have other expertise (from financial to maintenance) and voluntarily take on environmental responsibilities. This suggests that adapting the structure of the organisation to incorporate environmental benchmarks and responsibilities within each team can be particularly effective.

Desso, Havas and Acciona have also changed their operational structures to integrate environmental issues deep within their organisational charts. 'Quality Assurance' and 'Environmental Directors' have become 'Sustainability' and sometimes 'Innovation, Managers' with more profound and wider functions. This has helped to raise awareness and commitment both internally and externally.

### **Open Collaboration – Partner with strategic stakeholders**

The breadth of the environmental challenge suggests that a company's or an individual's isolated efforts, even if important and praiseworthy, will not have an impact by themselves. Environ-

mental sustainability calls for collaborative action. The introduction to this study concluded that four directions could be given to this collaboration: Influencing the whole supply chain, networking with stakeholders such as NGOs, scholars and scientists, looking into external communications and engagement with consumers; and developing sector clusters through collaboration with competitors.

The joint analysis of the literature and of the four companies suggests four potentially cumulative ways of engaging with others in the quest for environmental sustainability.

### **1. Use your bargaining power to influence the supply chain.**

Both Scandic and Desso have used their bargaining power to encourage engagement from their suppliers. They have had to end certain relations with some of their suppliers but have gained renewed commitment from most of those who originally endorsed their new policies. Scandic's experience emphasises that the supply chain can potentially limit a company's achievements, but, if procurement policies are well designed, the supply chain can also represent a key source of new opportunities.

### **2. Invest in communications with the consumer base.**

Investing in communications evidently provides the twofold advantage of lobbying for wider societal change whilst, at the same time, improving the company's image. Companies thus hope to create a broader consumer base as well as promote general goodwill towards them from regulators and public administrations, which can also be clients and important stakeholders. Acciona understood the potential of this strategy and invested heavily in communication campaign. Similarly, Desso devoted a great deal of efforts to inform about the 'Cradle to Cradle' philosophy. Havas used the Sustainable Futures study to present worldwide its new focus on sustainability. Finally Scandic hotel is directly communicating with the customer through specific Better World website and the hotel facilities.

### **3. Partner with external consulting organisations.**

Scandic and Desso have both worked in extremely close collaboration with organisations specialised in accompanying businesses through the change process towards environmental sustainability. Working with 'The Natural Step' helped the Scandinavian hotel chain to understand the global environmental challenges and to design a new strategy taking these challenges into account. The scientific conditions for a sustainable society were seen as a basis for Scandic's business model.

For Desso, the close partnership with 'Cradle to Cradle' framed the carpet manufacturer's new identity. Meanwhile, Acciona set up an independent expert committee with environmental NGOs to improve its sustainability policy.

#### **4. Lobby other key business partners.**

The four companies studied mentioned that their sustainability visions have influenced their relationships with their main business partners. Scandic hotels continuously lobby building owners to make the most environmentally-friendly decisions. Desso partners with other companies which have adopted the 'Cradle to Cradle' methodology to combine their communications efforts. They are also encouraging new businesses to join the initiative. Havas is seeking to engage partners and others companies in the sector to make steps together towards sustainability. Acciona participates in different working groups dedicated to environmental issues such as energy and climate change.

### **Eco-Innovation – Integrate sustainability in operations and products.**

When it comes to fighting large-scale environmental issues such as climate change, water scarcity or loss of biodiversity, small steps are not the way forward. Deep structural changes are necessary. If a business is serious about transforming itself in order to mitigate the impact of its activity on the environment, it needs to go beyond carbon footprinting even though the latter is a good start. As explained in the introduction, among other methodologies and schemes, we refer to the Sustainable Pathway which emphasises three steps on the road towards sustainability: Planning for quick wins; developing eco-innovation projects with new green products and services; and strategically changing systems through re-engineering processes.

The four companies studied have not necessarily followed this exact order but they have all gone beyond implementing token initiatives to enact deeper changes in their activity structures.

#### **1. Use to reposition the company.**

The four companies have integrated eco-innovative projects to strategically position their company in their sector. Acciona has developed new green markets and effectively changed the core of its activities, a shift which has been consolidated through business acquisitions. Desso promotes eco-design as a way to reposition the carpet after a change of ownership and management. Scandic uses environmental values to create a coherent culture which can engage both customers and employees. Havas is "helping its clients to understand and leverage the opportunities from more sustainable practices, through study and internet tools." thereby improving its strategic positioning in the ads industry.

#### **2. Promote the change through green certifications.**

Certifications have been helpful for the companies studied to achieve a real and lasting competitive advantage and improve transparency and trust. Desso has earned Cradle to Cradle certifications for some of its product ranges. Scandic has secured eco-friendly labels and Acciona is

broadly ISO 14001 certified. Environmental certifications help to rationalise the internal policy, implement benchmarking strategies and commit the whole company to a common goal.

### **3. Secure quick wins as a first step towards systemic change.**

Widespread change is not achieved overnight. Quick wins help pave the way towards broader systemic business change. Havas has implemented a carbon footprinting strategy as a first step to engage its employees and provide concrete data with which to engage them. Desso has created a two-phase plan which consists of eliminating expensive pollutants in the first stage and better efficiency of its basic operations. Acciona was able to quickly gain a strong leadership on wind energy that help promoting the shift towards sustainability from its other business units such as water and infrastructure.

### **4. Measure your progress and quantify your targets.**

Measurement is central and helps focus efforts on the weakest areas. Havas, Scandic, Acciona and Desso have all implemented measurement schemes. Key Environmental Indicators such as energy efficiency, water use, waste produced, etc. are normally published in the respective companies' sustainability reports along with their medium and long-term goals. This continuous monitoring helps supporting the re-engineering of operations and products in the whole company.



## Final conclusions and recommendations to transform business towards environmental sustainability

Cultural Change – Embed environmental sustainability into the company's DNA

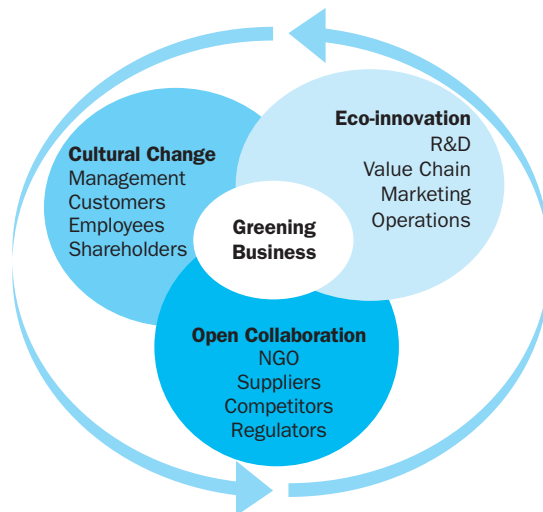
1. Design a disruptive, positive and ambitious vision.
2. Engage and empower employees and partners.
3. Secure the leader and top executive's endorsement and commitment
4. Maintain new values alive throughout the organizational structure.

Open Collaboration – Partner with strategic stakeholders

1. Use your bargaining power to influence the supply chain.
2. Invest in communications with the consumer base.
3. Partner with external consulting organizations.
4. Lobby other key business partners.

Eco-Innovation – Integrate environment into operations and products

1. Use strategic eco-innovative projects to reposition the company.
2. Promote the change through green certifications.
3. Secure quick wins as a first step towards systemic change.
4. Measure your progress and quantify your targets.



Source: Business Going Green, Esade.



## For further insights – websites of interest

**THE NATURAL CAPITALISM:** [www.natcap.org](http://www.natcap.org)

**BIOMIMICRY:** [www.biomimicry.net](http://www.biomimicry.net)

**THE NATURAL STEP:** [www.naturalstep.org](http://www.naturalstep.org)

**CRADLE TO CRADLE:** [www.mbdc.com](http://www.mbdc.com)

**STRATEGY FOR SUSTAINABILITY:** [www.strategyforsustainability.com](http://www.strategyforsustainability.com)

**GREEN TO GOLD:** [www.eco-advantage.com](http://www.eco-advantage.com)

**GLOBAL FOOTPRINT NETWORK:** [www.footprintnetwork.org](http://www.footprintnetwork.org)

**EARTH POLICY INSTITUTE:** [www.earth-policy.org](http://www.earth-policy.org)

**SOCIETY FOR ORGANIZATIONAL LEARNING:** [www.solonline.org](http://www.solonline.org)

**WORLD BUSINESS COUNCIL FOR SUSTAINABLE DEVELOPMENT:** [www.wbcds.org](http://www.wbcds.org)

**WORLDWATCH INSTITUTE:** [www.worldwatch.org](http://www.worldwatch.org)

**WORLD RESOURCES INSTITUTE:** [www.wri.org](http://www.wri.org)



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**Daniel Arenas**

**Research co-ordinator at the Institute and Professor in the Department of Social Sciences, ESADE**

He holds a PhD and an MA from the Committee on Social Thought at the University of Chicago, a BA in Philosophy from the University of Barcelona and an Executive Development Programme diploma from ESADE. He teaches courses in sociology, business ethics and corporate social responsibility. His research interests focus on the areas of business ethics, sustainability and community relations.

**Jérémie Fosse**

**Co-founder and president of eco-union and collaborator with the Institute for Social Innovation**

Industrial Engineering degree from INSA in Lyon, France, specialising in industrial organisation. He studied at the Technical University of Berlin (TUB) and has completed an Executive MBA at ESADE Business School. He has experience working in several energy companies in various countries. He is Director of Global Eco Forum and founding member of Ecodigma, a strategic consultancy firm in sustainability.

**Emily Huc**

**Collaborator with the Institute for Social Innovation**

Law degree (University of Toulouse) and Business Administration (EICD 3A, Lyon), Master in Human Rights from the University of London and postgraduate studies in Organisational Change Management (Birkbeck University, London). She has worked in international co-operation NGOs in various countries in Europe, Asia, Africa and Latin America. Specialising in internal change, she has led change in the decentralisation of programmes for the international NGO, Christian Aid. Founder and president of the ethical clothing company 'by eve'.



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# ESADE

Ramon Llull University

Av. Torrelblanca, 59  
08172 Sant Cugat del Vallès (Barcelona)  
T. (+34) 93 280 61 62  
innovacionsocial@esade.edu  
www.innovacionsocial.esade.edu

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