

## **CWC 2009**

### **The Delicate Quest for Corporate Environmental Sustainability**

By Frank Wijen, Rotterdam School of Management, The Netherlands

#### **Synopsis**

Greenheart, a multinational food producer headquartered in the Netherlands, has long sought environmental sustainability. Greenheart initially made great strides: it embraced sustainability as a core value, rethought its business activities, was open to a variety of (external) stakeholders, and allocated ample means to reduce its environmental impact. The initiative, however, lost momentum following a change of ownership and the advent of economic difficulties: sustainability was interpreted in a more restricted sense and became of secondary importance, environmental activities had to fit within the existing business framework, a more restricted number of predominantly internal stakeholders were considered, and the environmental budget largely evaporated. At the same time, environmental activities were undertaken on a more structured, integrative, and "realist" basis. Were the changes in Greenheart's environmental practices positive or negative from the viewpoint of sustainable business development? What were the critical factors accounting for the changes in corporate environmental performance?

#### **Company Background: From Greenheart to Greenheart Plus**

Greenheart was created around 1900. Starting as a small, craftsman-like Dutch food producer, by the end of the twentieth century it had evolved into a corporation with over 20 subsidiaries on four continents, employing over 3,000 people. The last years of the previous century in particular witnessed significant increases in sales and employees. Greenheart's branded food products were sold around the globe. The company had one particularly successful product, the sector's second best-selling worldwide.

Greenheart, however, sensed that its sales were levelling off in an increasingly competitive market. This led to a radical decision. Early in 2001, the family that had by and large owned Greenheart for a century sold its shares to a foreign, family-owned company, also operating in the food industry. The buyer had already possessed a minority interest in Greenheart's equity for several years. All shares, including those that were traded on the public stock market, fell into the hands of the new owner.

Prior to the take-over, Greenheart was run by one and the same chief executive officer (CEO) for 25 years. This CEO, who retired after the take-over, shared with his family predecessors a personal, religiously inspired conviction that nature was in a critical state. This conviction had far-reaching implications for Greenheart's corporate values. Environmental concern was one of the four major values included in its corporate mission statement and a recurrent theme in its annual reports. In 1990, the CEO embraced the

conclusions of the World Commission on Environment and Development's 1987 "Brundtland Report", which warned about "the accelerating deterioration of the [human environment](#) and [natural resources](#) and the consequences of that deterioration for [economic](#) and [social development](#)." The company created a fund for environmentally benign investments which did not meet the corporation's normal financial standards. It also started to transfer 1% of its net annual profit to societal initiatives that aimed to improve public environmental awareness. The CEO fulfilled the role of environmental value-keeper within the highest strategic forums.

The new owner did not share this drive for environmental sustainability. He had bought Greenheart because of its marketing and profit potential. After the take-over, which was formally a merger, the enlarged company ('Greenheart Plus') attained more than twice the level of Greenheart's sales. Greenheart Plus ranked among the global top-ten producers in its sector, with some 30 subsidiaries and over 8,000 employees worldwide.

While environmental values did not completely disappear, there was a shift in corporate values – as reflected by changes in the corporate mission statement. In 1995, Greenheart's mission was stated as follows: "We care for the environment, and are dedicated to reducing our impact to a sustainable level." Greenheart interpreted sustainability as conducting its business activities without negatively affecting the environment. The company's ambition was to become an environmentally sustainable business by the year 2005. In 2002, after negotiations between representatives of the former and new owners, the following corporate mission was formulated: "We, employees of [Greenheart Plus] (...) cherish the role that we play in our own [social and natural] environment[s], because we work for an organisation that is dedicated to both society and the environment." A statement of norms and values was created as a compromise, adding: "We want to limit our impact on the environment as much as possible, and work towards long-term sustainability." It should be noted that no time period was added and that the highest corporate objective, reflected in the vision statement, no longer mentioned the environment: "We want to reinforce our position as a world leader in the [food] industry, and want to offer people added value by creating appealing quality products."

## **Stage 1: Greenheart**

### **Environmental Management Structure and Stakeholders**

Prior to the take-over, environmental objectives were initiated and ratified at Greenheart's strategic apex. Environmental issues were a recurrent agenda point in meetings between the CEO and other members of the corporate top management team (TMT), each of whom represented either a geographic cluster of markets or a key functional area. An environmental policy group, consisting of representatives from different functional disciplines and headed by the corporate environmental coordinator, prepared advice for the corporate TMT. Once the TMT had ratified environmental proposals, its decisions were conveyed to the managers of the respective subsidiaries. The managers were formally responsible for the implementation of TMT decisions by their subsidiaries.

The CEO who had led Greenheart for 25 years until his retirement in 2001 fulfilled two roles. As corporate value-keeper, he was in charge of guarding and stimulating environmental values within the company. His personal conviction regarding the necessity to stop environmental degradation was the driving force behind Greenheart's pursuit of environmental sustainability. The CEO was also the highest corporate decision maker. He chaired the corporate TMT and did not hesitate to use his formal power to advance the environmental agenda: "Fortunately, I am the [CEO], which gives me a certain influence. If I had been any of the other colleagues, it would have been much more difficult."

The corporate environmental coordinator then discussed the implementation of TMT decisions with the managers of the different subsidiaries. The subsidiary environmental coordinators, who combined this function with other activities, were subsequently supposed to convene environmental working groups. Such working groups consisted of representatives from the different functional disciplines concerned, as well as a corporate technical staff member and an external adviser. The environmental working groups brainstormed options for improvement projects and retained the most viable ones. Most environmental initiatives were, however, taken on an ad hoc basis since these groups were never fully operational, apart from the one in Greenheart's largest production subsidiary, which started functioning well from 2000 onwards. Subsidiaries needed to regularly report to and obtain approval from corporate bodies for projects with substantial financial implications. Approved proposals were converted into action plans for the next year.

The main activity of Greenheart's corporate environmental coordinator during the period 1996-1999 was to coordinate company-wide environmental actions. He conveyed information from subsidiaries to the corporate environmental policy group, which advised the corporate TMT. The environmental coordinator ("actually, I am a bridgehead") also had contacts with general managers and subsidiary environmental coordinators on the implementation of the corporate environmental policy and the exchange of new (technical) knowledge. He further consulted with the corporate technical staff and had regular consultations with the CEO on the company's environmental actions. The environmental coordinator's external contacts included a government-led brainstorm group on corporate sustainability, an open dialogue with environmental pressure groups, technology-related contacts with universities, and meetings with external advisers.

Early in 2000, a new corporate environmental coordinator was appointed. While his tasks were similar to those of his predecessor, he had a quite different vision of his function. The new environmental coordinator focused on technical innovation. Over a five-year period, he wanted to replace the existing batch-wise production system, engendering a high waste rate, by a continuous, closed-loop production process, as was usual in the chemical industry, where he had worked before. The environmental coordinator also wanted to achieve short-term technical improvements, introduce biodegradable packing, improve employee mentality, and integrate backwards in order to better control the environmental performance of Greenheart's products over their entire life cycles.

Greenheart's subsidiary environmental coordinators were in charge of implementing the corporate environmental strategy at the shop floor level, for which the commitment of the operational staff was indispensable. Commitment, however, was compromised by different objectives, involving competitive time claims. In 1999, a subsidiary environmental coordinator observed: "The main purpose of almost anyone in the production organisation is to produce. When we come with our environmental activities, a choice has to be made: Do I let someone [make our products] (...) or save water? The choice, then, is made

quickly: let the person make [a high volume of our products]." He concluded that there were conflicts of interest between targets at the corporate level and the subsidiary level, as well as between environmental values embraced by blue-collar personnel ("who just come for the money") and white-collar employees.

The corporate technical staff formulated the company's technical standards and provided solutions for prevailing environmental problems. The technical staff also played a role in more eco-efficient materials procurement, investment decisions, and the introduction of an interactive environmental database.

Greenheart maintained a tradition of open communication with the outside world. It participated in several reflection platforms, for example with the Dutch Ministry of the Environment and a business platform of food producers committed to sustainable development. The company also openly communicated with environmental pressure groups. The corporate coordinator viewed the environmental movement as cooperative but devoid of inspiring ideas. In the second half of the 1990s, Greenheart was one of three companies that participated in a Dutch government-coordinated pilot project on the firm-level application of the sustainability concept. Greenheart's corporate environmental coordinator at the time was highly appreciative of this "very good dialogue" because "they are in a position to constantly lobby, within other governmental departments and internationally, as to what are or may be the possible developments in the area of sustainability. It concerns, then, the development of insights from which our own ideas can be distilled, our own strategy can be adjusted. From that perspective, it is often very meaningful."

Greenheart's environmental management structure is shown in **Exhibit 1**.

## **Environmental Measures and Performance**

During the 1990s, Greenheart took a host of internal environmental measures to reduce the company's environmental impact, starting with ones that were easy to realise – the 'low-hanging fruit'. These included: the purification and recycling of effluent water; the use of surface water for cooling purposes; the separation and recycling of solid waste; a green office plan (the use of recycled paper, the use of LPG for company-owned cars, the separation of solid waste, etc.); the use of thinner packing materials; and the local procurement of materials by an overseas subsidiary to avoid long-distance transport. Greenheart also installed solar panels and wind turbines at some production sites, which yielded the public image of a highly proactive company. When further internal measures were not feasible within the existing technical frames, external measures were taken. Examples included the purchase of energy from renewable resources ('green electricity') and a reforestation project to compensate for excess emissions of carbon dioxide.

In the 1990s, Greenheart measured its environmental impact through a quantitative, tailor-made environmental barometer, which focused on five global areas of environmental disruption: greenhouse gases, acidification, water consumption, effluent water, and solid waste. In each of these areas, the barometer measured the distance to the final target, which was zero impact. Greenheart's environmental distance to its targets, as measured by the barometer, dropped from 25 in 1992 to 15 in 1996 and 12 in 1999.

---

Early in 2000, the arrival of a new corporate environmental coordinator gave impetus to new technical measures such as closing water loops through the use of advanced membrane systems and reverse osmosis. Further measures were also studied: stock-taking of short-term environmental improvement possibilities; product chain management, involving qualitatively and quantitatively different supplies – this was important because 60% of the environmental impact of Greenheart's main product was situated elsewhere in the product chain; the development of a sustainability management system, in which managerial bonuses were related to environmental performance; and the replacement of the existing batch technology production method, leading to a 'normal' 10+% rate of defective products, by continuous process technology, including closed systems and better process control. Continuous production would involve lower energy and water consumption, and lower emission levels of solid waste and effluent water.

Apart from these actual and envisaged technical measures, Greenheart engaged in initiatives to create environmental awareness. This was stimulated at all levels, ranging from the highest strategic levels to the shop floor. Environmental awareness recurred on the agenda of the company's strategic forums, was a part of corporate training programs, and was propagated through an internal, bimonthly environmental pamphlet. Special environmental days were organised to clean up the environment and there was social pressure among employees. A marketing manager noted: "When I leave my office while the light is on, someone else will turn it off, and say: 'Watch it.'" It should be noted, however, that environmental values were only upheld by a minority of employees who had to motivate the passive majority. A field visit in 1999 left one with the impression that operating personnel in particular seemed to lack environmental awareness.

Greenheart's ability to meet its energy efficiency agreements with the Dutch government was affected by the performance of external distributors. The marketing department had regular contacts with transport companies on logistic optimisation. A representative of the carrier, however, admitted that the environment was not an issue when distributing goods. The carrier did not necessarily use clean trucks. Delivery schedules were determined by customer demands and timely deliveries often entailed partial truck-loads.

In late 2000, an external crisis that affected one of the components of Greenheart's main product induced the company, for safety reasons, to conduct an overnight change in its product composition. This change led to significant production problems, including an extraordinarily high rate of defective products, which exceeded 20% instead of the 'normal' 10-15% waste rate.

## Stage 2: Greenheart Plus

### Environmental Management Structure and Stakeholders

In 2001, the new owner appointed another CEO, who wielded his considerable formal power predominantly to enhance the company's financial performance. He did not attribute a high priority to environmental initiatives, except those which were financially rewarding. Whereas the former CEO was also the environmental value-keeper, the new CEO delegated this function to another TMT member, who was clearly less influential. As a result, top management commitment to environmental sustainability declined after the take-over. The 2003 environmental report of the main Dutch subsidiary of Greenheart Plus stated: "The aim is no longer sustainable management but control of the environmental load stemming from one's own business activities."

After the take-over, the environmental management's centre of gravity progressively shifted from the corporate to the subsidiary level. While the corporate TMT still included a member representing environmental concerns, it focused on socio-economic targets and abstained, by and large, from launching new environmental initiatives. The new owner's 'lean and mean' philosophy was applied to the corporate environmental department in 2003 when it was completely dismantled; in its wake, company-wide activities such as the exchange of corporate environmental data and the alignment of local environmental policies halted. The corporate technical staff was also seriously downsized; by 2004 this body no longer played a significant role in the environmental area.

All environmental responsibilities were allocated to subsidiaries, which focused on locally relevant issues, particularly regulative compliance and cost savings with (positive) environmental side effects. While a formal management system was not universally embraced, environmental issues were addressed in a more systematic way, at least in the Dutch subsidiaries. Operational Teams (OTs) were created, consisting of the production manager, the heads of different functional areas (manufacturing, packing, engineering, logistics, etc.), the environmental coordinator, and other staff officers (personnel, finance, quality control) of the respective subsidiaries. The OTs were endowed with ample formal and financial authority as well as knowledge of different functional areas, but faced capacity constraints since all persons were involved on a part-time basis. The teams convened once a month to evaluate past environmental performance, trace (overt and hidden) problems, discuss new targets, and formulate new action plans. These plans were subsequently implemented by the department(s) concerned and coordinated by the environmental coordinator, who had regular bilateral contacts with the persons involved. The aim was to set up a standardised plan-do-check-act system with parallels to quality management and leading to incremental but continuous performance improvements.

After Greenheart Plus was restructured, the subsidiary environmental coordinators began to play a central role by initiating and coordinating environmental actions. Several tensions disappeared. Since there was no more active corporate steering, the subsidiaries could largely formulate their own targets. Different types of objectives were 'reconciled': environmental targets were formulated in economic terms, such as reduced waste rates leading to a lower environmental load and enhanced volumes of saleable products. In 2004, the environmental coordinator of a major subsidiary characterised this reorientation as "a shift from idealism to realism," asserting that waste prevention and other eco-efficiency measures have a much higher environmental pay-off than other measures.

Internal tensions also diminished because the targets between administrative and production personnel were aligned in the OTs, which became effective from 2004, at least in the Dutch subsidiaries. These teams were important because they provided complementary insights from different functional areas and, above all, management commitment to regularly establish, evaluate, and revise environmentally relevant targets. The OT was regarded by a local coordinator as “a pragmatic environmental management system that warrants structural attention to the environment.”

Though Greenheart Plus continued to cooperate with the Dutch Ministry of the Environment in a project to develop a sustainability management system linking environmental performance to managerial incentives, contacts with external reflection platforms and the national government were broken in 2003 when the corporate environmental department was dismantled.

In contrast, contacts with local governmental bodies, including municipalities and local water boards, were intensified after the reorganisation. It was acknowledged that regulatory compliance had too readily been taken for granted. Local environmental issues such as noise and odour, which had previously been ignored in the sustainability barometer, were given more attention. In some areas, in particular the storage of dangerous substances and the communication of environmental data, several subsidiaries had not acted in compliance with the regulatory requirements over the period 2000-2004. Priority was then given to restoring compliance from 2005 onwards, though understaffing remained a point of concern.

The environmental management structure of Greenheart Plus is shown in **Exhibit 2**.

### **Environmental Measures and Performance**

After the take-over and the advent of economic difficulties, the company ceased its quest for business as unusual. Existing environmental practices were refined through minor but systematic adaptations in production methods, which were relatively well embedded at the operational level. While care for the environment was still an official objective, it was no longer one of the highest corporate values.

Production problems which began before the take-over had a very negative effect on Greenheart's financial and environmental performance in 2001 and 2002. The priority of the corporate TMT now became the short-term improvement of output and profit figures. As a result, a major reorganisation took place in 2003, in which 30% of the Dutch employees lost their jobs. Worldwide, many top managers with environmental commitments left the company and were replaced by people who were unfamiliar with the company's (environmental) antecedents. The annual budget of over 2 million euros for environmental actions, agreed upon before the take-over, was frozen when the financial waters became rough and eventually faded into obscurity.

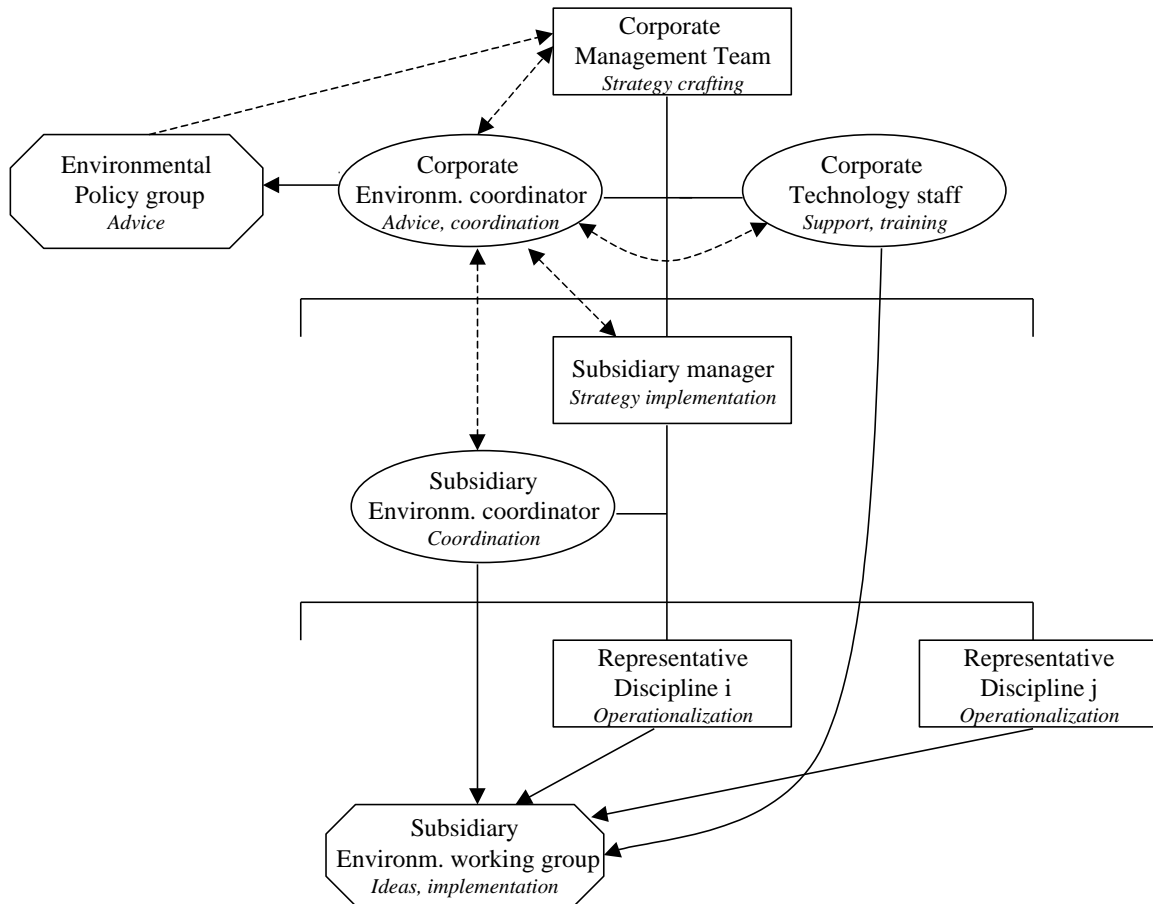
From 2001 onwards, many employees ranked the sustainability cause lower than before because they felt that their jobs were threatened. Those who tried to uphold the ambitious objective were marginalised; most employees showed little resistance towards the erosion of environmental values.

After the take-over, environmental actions were reoriented towards those that were required by law or were cost-effective – measures that paid off within two years due to savings on raw materials or other inputs. Three environmental priorities were identified: enhanced energy efficiency, decreased volumes of (effluent) water, and decreased production waste. This led to measures such as the refinement of production techniques, tracing and repairing leakages of compressed air, and the increased recycling of effluent water. The focus on cost savings engendered some environmental gains in Greenheart Plus' distribution through the enhanced loading of trucks and less frequent deliveries. Environmental projects that were not directly rewarding, such as awareness creation, research on continuous production and product chain management, the conceptualisation of sustainability, external compensation measures, and the development of renewable energy, came to an end.

Greenheart Plus' exact score on its environmental barometer was no longer known as relevant data were no longer systematically collected and analysed. It was clear, however, that the distance-to-target had risen due to production-related problems and a higher automation rate. It was also felt that one overall figure was not very explanatory because the indicator consisted of a large number of heterogeneous components. It was, therefore, decided to abandon the existing barometer and to use more specific indicators. After the dramatic year 2002, with its important production-related problems, the performance at the main Dutch production site showed, by and large, progress in the (newly) designated priority areas of enhancing energy efficiency, decreasing the production waste rate, and reducing fresh-water consumption and effluent-water production. At the same time, the production site in the Netherlands did not fully meet all regulative requirements, especially administrative obligations.

To conclude: in its quest to reduce its impact on the environment, Greenheart embraced sustainability as a core value, rethought its business practices, was open to a variety of (external) stakeholders, and allocated ample means to reduce its environmental footprint. The initiative, however, lost momentum following a change of ownership and the advent of financial difficulties: sustainability was interpreted in a more restricted sense, environmental activities had to fit within the existing business framework, a smaller number of mostly internal stakeholders were considered, and the environmental budget largely evaporated. At the same time, environmental activities were undertaken on a more structured basis. Were the changes in the company's environmental practices positive or negative from the viewpoint of sustainable business development? What were the critical factors accounting for changes in corporate environmental performance?

**Exhibit 1: Environmental Management Structure of Greenheart (1999)**



**Exhibit 2: Environmental Management Structure of Greenheart Plus (2004)**

