



Pathways to Corporate Sustainability

How Three Developers Pursue Green Agendas

Jerry Yudelson*

Abstract: This article explores the way in which three shopping center developers—two European and one American—are pursuing their green agenda. While the pathway that each is taking differs, some common themes emerge. CEO leadership, effective communication, a commitment to training, evaluation of completed green projects, and “greening” its corporate operations are all important ingredients for success.

Environmental sustainability is firmly on the global corporate agenda, including in the shopping center industry. There are many paths that shopping center developers and owners can take as they create and execute a sustainability program both internally and externally. This article looks in depth at three such programs undertaken by two large shopping center developers based in Europe and one based in the United States. Their different approaches should give guidance to other companies that are launching a green agenda.

A. Multi Corporation

Multi Corporation (Multi) is headquartered in Gouda, The Netherlands, and is active in 23 countries throughout Europe, extending from the United Kingdom (U.K.) to Turkey. The article is based on interviews with three key executives in April 2008 at the company’s headquarters: Glenn H. Aaronson, CEO of Multi Corporation; Arco Rehorst, Technical Director for Multi Asset Management; and Arno G. N. Ruigrok, Adjunct Director of Multi Vastgoed. In 2007, Multi was named “European Retail Developer of the Year” at the MAPIC conference in Cannes.¹

CEO Aaronson is a firm believer in changing the world via the “2% solution,” making things 2% better every year, instead of trying to make huge leaps all at once. He believes that any corporation can handle 2% change such as 2% higher costs for green buildings and 2% percent per year improvement in results. In the space of 10 years, he notes, “you’re then 20% better, and it’s virtually painless.” In his view, the solution to the challenge of achieving sustainability is “getting better” all the time, the well-known approach of continuous improvement. The issue of course is how to audit the changes to make sure that the 2% change is happening each year, without backsliding.

Multi Corporation’s Sustainability Principles

Aaronson has led the charge at Multi toward incorporating sustainability into every aspect of the

company’s operations. The first shopping center to use the company’s sustainability principles is being built in Duisburg, Germany (Forum Duisburg), and should be occupied in the fall of 2008.

Multi has formalized its sustainability commitment into five key principles, known as the “5Es for a Sustainable Future” program:

1. Everlasting Design—Design should aim at creating flexible and timeless urban spaces that will hold their value far into the future;
2. Ecological Footprint—Each project should optimize the use of land and reduce the consumption of resources, by both constructing new buildings more effectively and managing existing buildings more efficiently;
3. Equal Benefits—Multi’s projects should provide benefits to the local community, through a variety of “give back” programs;
4. Economic Vitality—Multi’s projects aim to create healthy business environments to ensure financial sustainability;
5. Education for All—Each project should raise public awareness of the changes required to preserve our planet.

Multi’s five principles are its own customized version of the traditional triple bottom line such as the “3 Ps”—People, Planet and Profits—or the “3 Es”—Ecology, Economy and Ethics. The five principles also contain operational criteria that reflect CEO Aaronson’s belief that if a company holds strong beliefs internally—in this case, beliefs about sustainability—it is also important to express those values externally.

Turning Principles Into Development Activity

With the right focus on customer, shopper, employee and community benefits, appropriate to the time and place, it is relatively straightforward to craft a set of operating guidelines for future development and to begin filling in the outline with specific green features.

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¹ <http://www.multi-development.com:8080/web/nederland.nsf/wwwVwContent/l2multipleawardsformultidevelopmentatmapicincannes.htm>, accessed June 3, 2008.



A statement of core values such as the “5 Es” begins to suggest synergies to the design team. For example, a focus on light and daylighting immediately integrates with energy efficiency considerations. Studies of daylighting in retail show not only gains in sales of about 5%, but also energy savings of about 10% of initial investment per year.² Appropriate transport connections begin to reduce the carbon footprint of the development by encouraging more public transit and pedestrian access.

CEO Aaronson strongly supports the use of Building Research Establishment’s Environmental Assessment Method (BREEAM), the U.K. green building assessment and certification standard for shopping centers in the European Union. Aaronson believes that BREEAM is more flexible than other systems such as Leadership in Energy and Environmental Design (LEED). According to Aaronson, BREEAM can be customized to fit many different development situations and that it is focused appropriately on the social dimension of development. In addition, he says there are obvious considerations such as water and energy use. The Duisburg project expects to receive a BREEAM “Excellent” rating, which is equivalent to LEED Platinum in the U.S.

One interesting approach adopted by Multi is to use each shopping center as a forum for education about sustainability by creating an educational focus in each center. In the case of the Forum Duisburg project, there is a social program that trains disadvantaged citizens in construction and center operations, in cooperation with the local municipality. Consisting of 45,000 sq m of gross leasable area (GLA), the project is expected to cost about €120 million and includes a district heating plant using combined heat and power systems, a green roof and insulation that is well above standard.³

Getting the Company on Board

Multi has gone through a fairly typical progression to reach its current level of commitment to sustainable development activities.

Under Arco Rehorst’s leadership, a Sustainability Committee was created in 2006, followed in 2007 by a strong CEO commitment to move forward with the committee’s recommendations. To create a focus for future work, Rehorst and the committee started with a long list of possible topics, some 63 in all, which it narrowed down to the “top 12.”

In 2008, the firm began regular videoconferencing with its 20 country managers, to bring them up to speed on the commitment and the program. The company is already a major fan of International Standards Organization 14001 (ISO 14001), the international environmental management standard. The goal is to improve sustainability achievements with each succeeding project. To this end, management believes that it is important to set aspiration levels at the outset of a project and then score performance against these levels.

Each new investment proposal submitted to management now becomes an “investment plus sustainability” proposal in that it details the sustainability achievements that it targets. Each new development will carry tenant guidelines, for example, to set green cleaning standards. The purpose of this approach is to transform investment decisions over time, by encouraging development executives to change what they consider to be appropriate considerations. In this case, sustainability has to be considered when money is being allocated, or else the project is likely to fall by the wayside.

Getting the Customers on Board

Every developer has two sets of customers: directly, the retail tenants, and, indirectly, the customers it hopes to attract to the shops. Because sustainability measures typically involve higher costs at the beginning, the developer’s dilemma is either how to persuade the retail tenants to pay higher rents or to persuade the project’s investors to accept slightly lower returns. This is an important problem, but one likely to disappear in the next three to five years, as the entire world moves toward sustainable development. In addition, tenants may want to secure the reputational benefits of locating in green centers. Whether they will be willing to pay higher rents for these benefits is still open to question.

The issue of potentially lower returns is also likely to be temporary for two reasons. First, the centers with lower energy, water and waste management costs will be able to demonstrate those reductions in shared operating costs as time goes forward; and, therefore, they have the potential for rent growth. Second, developers with green experience are likely to obtain other benefits, such as attracting investment capital and recruiting and keeping key employees; this is a major emerging issue in most advanced economies at this time.

² See 2003 studies by the Heschong Mahone Group, sponsored by California’s Pacific Gas & Electric Company, available at http://www.h-m-g.com/downloads/Daylighting/A-5_Daylight_Retail_2.3.7.pdf, accessed June 13, 2008.

³ <http://www.forumduisburg.de/Aktuelles.php>, accessed June 3, 2008.



**B. Sonae Sierra
Combining Ownership, Development and Management**

An innovator in the shopping center development business, Sonae Sierra offers an integrated approach to owning, developing and managing shopping centers. Sierra centers integrate leisure with retail and other services with a focus on green issues. Based in Portugal, the company currently operates 48 centers, with 28 under development in Portugal, Spain, Italy, Germany, Romania, Greece and Brazil. For fiscal year 2007, the company reported net operating revenue of €639 million, with net profit of €300 million, and net asset value of €1.7 billion.⁴

Sustainability

Sonae Sierra’s CEO, Álvaro Portela, created a corporate responsibility policy in the past decade,⁵ based on the firm “belief that no economic activity can take place in a vacuum.”⁶ The company was a founding member in 1995 of the World Business Council for Sustainable Development, one of the leading organizations in the field. The ultimate goal is for the business to be “sustainable, in the very long-term meaning of the word.”

Sonae Sierra uses an Environmental Management System (EMS) certified under the ISO 14001 standard (see Figure 12-1); the system is certified by Lloyds. The company’s Environment Manager oversees the application of the EMS to company operations. The key to ISO 14001 is its focus on continuous improvement. Sonae Sierra ensures sustainable buildings by focusing on environmental responsibility in the design, construction, and operation phases. Portela believes that the corporate responsibility policy is essential to its brand; but, he says, “like all brands, you have to deliver what you promise to your stakeholders to be taken seriously.” Hence the importance of each year’s corporate responsibility action plan and the EMS system for monitoring performance.

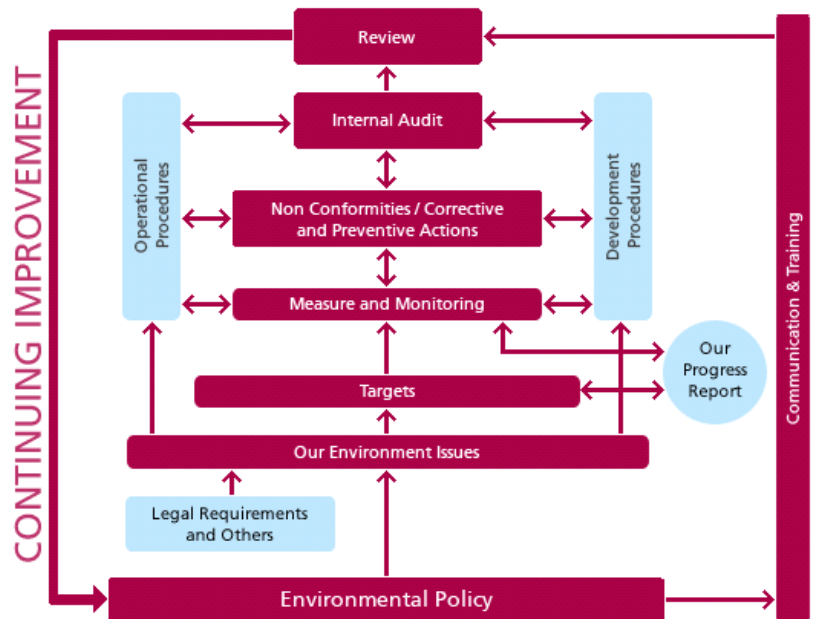
A centralized, online database gathers data for Sonae Sierra’s water use, waste and climate issues. This information generates reports that, for example, call for tighter water use, set annual targets for waste recycling and

provide directions for improving Building Management Systems (BMS):

1. Climate Change

The company’s stated short-term goal is to reduce greenhouse gas emissions by 10%. Sonae Sierra uses the Environmental Standards for Retail Development (ESRD)—an internal Internet specification tool—to come up with the best environmental practices in the planning and design of new shopping centers. The tool considers 190 standards that cover issues such as energy, water, waste, transport, health and well-being, site sustainability and materials. The standards are based on Sonae Sierra’s experience, best practices and certification schemes such as LEED and BREEAM. The standards determine the use of technologies such as solar, ventilation, efficient boilers, air-conditioning units, advanced lighting, and combined heat and power in design. The company is committed to achieving a high rating under the EU’s Energy Performance of Buildings Directive, which issues grades of A to G, from best to worst in terms of annual energy use per square foot/meter of operating area.⁷ Furthermore, the company is part of a three-year project (ending in 2009) called the World Business Council for Sustainable

**Figure 12-1
Sonae Sierra’s Environmental Focus Covers Four Major Areas**



⁴ Sonae Sierra company web site, <http://www.sonaesierra.com/Web/en-GB/home/default.aspx>, accessed July 20, 2008.

⁵ General sources for this article are from presentations by Elsa Monteiro on You Tube, <http://youtube.com/watch?v=pVRgKWmgYgU&feature=related> (Part 1) <http://youtube.com/watch?v=5C9VNoanVfg> (Part 2).

⁶ All quotes from an email interview with CEO Álvaro Portela, August 7, 2008.

⁷ See the European Union, http://ec.europa.eu/energy/demand/legislation/buildings_en.htm, accessed July 20, 2008.



Development's Energy Efficiency in Buildings (EEB) Project which delineates the changes necessary to have all buildings become zero net energy consumers.

ESRD standards have led to transport impact studies at the design stage. They result in green travel plans, local transport partnerships and encouraging greater use of public transport, walking and cycling. Furthermore, the company encourages efficient vehicle use through traffic calming measures, priority lanes, dedicated parking bays for carpoolers, refueling stations and points for alternative-fueled vehicles.⁸

In 2004, Sonae Sierra conducted a study to understand the greenhouse emissions of its core activities. In partnership with Ecoprogresso, a Portuguese environmental consulting firm, Sonae Sierra initiated the pilot phase of the project to estimate emissions. This phase was conducted in Portugal in its corporate offices and in the Centro Colombo and Rio Sul shopping centers. In the second phase in 2005, Sonae Sierra applied the Greenhouse Gas Protocol guidelines as a measurement tool to all its offices and centers.

2. Water

The company's goal is to maintain water consumption at or below four liters (one gallon) per visit per year; it claims to have reached this target in 2007. ESRD standards require water-efficient designs (such as equipment specifications and water recycling) and wastewater treatment (such as oil and hydrocarbon separators). Some of the water-efficient features are rainwater harvesting and gray water recycling, water-efficient sanitary equipment (such as spray taps and low flush toilets), efficient irrigation systems, and the use of non-water-intensive native or adapted plant species. Furthermore, to prevent pollution from rainwater run-off, filter drains and porous pavements are used.

3. Waste

The company's stated goal is to achieve a minimum 50%-recycling rate and a maximum 30%-landfill disposal rate. Sonae Sierra conducts site-specific waste management strategy studies to determine the required space for waste separation and recycling. The company calls for construction companies to provide reports of their waste management. Furthermore, it encourages tenants to

manage waste responsibly, even though it has little control over tenant activities.

4. Land Use

Sonae Sierra's goal is to use previously developed land for new shopping centers and to protect bio-diversity where possible in developing new sites. Where sites have been previously contaminated, the company takes remedial action according to the Canadian Environmental Quality Guidelines or the Dutch Standards for Soil Quality. ESRD standards specify planting indigenous plant species in landscaped areas, and favoring the use of hedgerows and green barriers.

Implementation Issues

Introducing a major change toward sustainability at the corporate level is not without its challenges. According to Portela, "the main challenge was the company's cultural evolution that we had to create in order to place the corporate responsibility management issues at the core of our strategy and mission. All the company, from board level to the rest of the staff, has to understand and believe that this [policy] is crucial for the growth of the company and it should impact the way we all do business." This challenge implies the need for a massive and continuing "sales job" inside the company, as people are continually brought into the organization and as those inside the company need constant reminders about the mission.

Portela also points out one of the major areas of concern for all developers, saying "another big issue is how to balance short-term [additional] costs against long-term externalities, since both the environmental and economic benefits are only visible during the operation phase. Only a company [like ours] that holds onto assets, and actively manages them, is able to recoup additional capital costs through reduced running costs."

As for the future two to three years, there is still the challenge "to keep our suppliers and tenants inspired to replicate our own sustainability efforts, and to continuously find innovative and more sustainable ways of developing and managing shopping centers."

C. Regency Centers

Regency Centers Corporation is a large public retail real estate developer operating more than 450 projects, primarily grocery-anchored and community shopping centers, throughout the U.S. The author interviewed Brian Smith, Chief Investment Officer (CIO), and moderated a presentation by the two key

⁸ Presentation by Elsa Monteiro, Head of Institutional Relations, Environment and Communication, Sonae Sierra, at ICSC CentreBuild Europe 2008, London, June 20, 2008.



Box 12-1

Examples of Sonae Sierra's Approach to Sustainability

El Rosal, Ponferrada, Spain. Built to reflect local character, this shopping center achieved ISO 14001 certification for the construction phase. One of the center's environmental features is a solar roof with 600 photovoltaic panels on a 1500-square meter area that cost €620,300. This results in energy production of 132,447 kilowatts per year with annual savings of €58,300. At current electricity prices, the company expects to recover the initial system cost after just nine years for equipment with a 25-year life. On average, emissions are reduced by 48 metric tons of carbon dioxide per year and over 25 years by 1200 metric tons of carbon dioxide.

Centro Colombo, Portugal. In this development, Sierra introduced the Green Travel Plan project. It analyses the transport infrastructure and implements measures to encourage and improve the accessibility of the shopping centre by public transport, bicycle and on foot. Furthermore, in customer surveys, Sierra asks what form of transport its customers use in visiting the centers, in order for it to monitor indirect greenhouse emissions.

Parque D. Pedro, Campinas, Brazil. Water is treated at the center's treatment plant and reused in bathrooms and for irrigation. In 2007, 48% of water supplied was from reclaimed sources. The reuse and irrigation system cost €83,115, while savings in the first year were €100,000. The center was one of the first buildings in Brazil to receive ISO 14001 certification.

Arrabida Shopping Center, Portugal. This center uses a composting system that allows garden managers to use organic waste in the center's green areas.

Zubiarte, Spain. The Bilbao city council and the Zubiarte management team introduced a bicycle loan scheme. People can borrow and return bicycles for free by registering on the Internet.

Vasco da Gama, Portugal. This project utilizes subterranean water from a non-potable water supply. The investment for the system consists of a pumping station and treatment equipment. Monthly water consumption has been reduced by 530 cubic meters (142,000 U.S. gallons), a saving of approximately €100 per month, corresponding to 11% of total water consumption. According to the company, the initial system investment will be recovered during 2007, with an annual cost-saving that is equivalent to €11,900 per year in the following years.

Luz del Tajo, Toledo, Spain. An EMS monitors areas such as energy-saving, transportation, water treatment, contamination, resource use, selection and use of materials, ecology and health. A building management system controls energy-savings, a pre-treatment system separating residues of fat and hydrocarbons, timers in the public taps and the use of filters in kitchen extraction systems.

players on the Regency Sustainability team at the 2008 ICSC RECon conference. They were Scott Wilson, Vice President Construction, and Mark Peternell, Vice President Sustainability.⁹

In November 2007, Regency's CEO and Chairman Martin "Hap" Stein announced the company's sustainability program, including a commitment to move toward LEED certification of 60% of all new developments beginning in 2010. According to a recent interview with Stein,¹⁰ the company is pursuing LEED certification at three centers, including the 700,000-sq ft Deer Springs Town Center in Las Vegas, now under construction.

CIO Smith and CEO Stein emphasize that sustainability has become one of the core values at Regency and is integral to its brand of "quality shopping centers." Regardless of the initial economics, key executives at the company are committed to sustainability; Regency realizes that it is large enough in the industry to make a difference, and it intends to do so with sustainable construction and operations programs.

According to Smith, the biggest obstacle at this time is on the tenant side: it is very difficult to find large retailers that have yet fully embraced sustainability and green building and who are eager to locate in centers with the same values.

Branding

As part of its sustainability initiative, Regency adopted a trademarked program called "GreenGenuity"—green ingenuity—as a way to demonstrate quality and innovation, as well as leadership in the field of sustainability and green building. The company expects that tenants with strong LEED certification programs for their own buildings may in the future also want to locate in centers that support that mission. In addition, the company expects that creating and implementing a sustainability program will appeal to investors who want green real estate in their portfolios.

Training

According to Smith, Regency is currently training key personnel in sustainable construction and the LEED

⁹ The author served as a consultant to Regency's in-house task force for approximately six months in 2007.

¹⁰ Randall Shearin, "Regency Gaining Ground," *Shopping Center Business*, May 2008. Available at <http://www.regencycenters.com/uploads/Regency%20Gaining%20Ground%20with%20Green%20Initiative.pdf>, accessed June 4, 2008.



certification system, including all vice presidents of construction and senior construction managers. There also is a condensed training program for all investment officers, which focuses on the business case for green development. A key part of the training is to place good information in people's hands and to remove the fear factor that going green will significantly harm a project's expected returns. Smith says that attitudes have to change before behavior will change. Training and providing good cost information are critical to changing behavior.

Capital Allocation

Similar to Multi, Regency requires that all new investment proposals are submitted to the Capital Allocation Committee to provide an assessment of the LEED certification potential of all or part of the center, as part of the due diligence process. Naturally, some projects do not work out. However, requiring all investment decisions to at least consider the sustainability issue should drive its green program forward and also teach its investment officers how to deal with the costs and expected returns of green development. Smith also points out that Regency is more likely to make these green investments in its larger centers, because there is a greater expense base against which to allocate the incremental costs of green development.

Developing a Sustainability Program

Regency began its sustainability initiative with an in-house task force. The group spent nine months looking at three key areas: cost and scope of green construction, as well as operations; LEED and public relations/marketing; and tenant and site assessment issues. One task force undertook detailed cost assessments for LEED certification of specific centers already in the development pipeline. In general, it appeared that LEED certification of individual in-line shops buildings could be accomplished at an incremental cost of about 2%.

Taking a Larger Perspective

Regency's task force also began to engage with the U.S. Green Building Council's (USGBC) "LEED for Retail" program, which at that time was just in the start-up stage. Regency became one of the first retail developers to declare its interest in LEED certification. Then, Regency actively engaged with the USGBC's development of a shopping center certification program. Similar to Multi's engagement with the BREEAM system, it is important for developers to recognize that they need to be a part of green certification programs

and contribute their expertise to the not-for-profits that typically provide these certifications. Since USGBC's "LEED" certification program typically recognizes only individual buildings, the issue of how to certify an entire shopping center requires more development time and a greater range of considerations, as well as engagement with key stakeholders in the LEED system.

Lessons Learned

There are many ways that shopping center developers can create a meaningful sustainability program. Yet it is interesting that there are common themes in the approaches that Multi, Sonae Sierra and Regency have taken, as summarized in Figure 12-2. These common themes have contributed to the achievements of their sustainability programs and also underpin the successful programs of other companies.

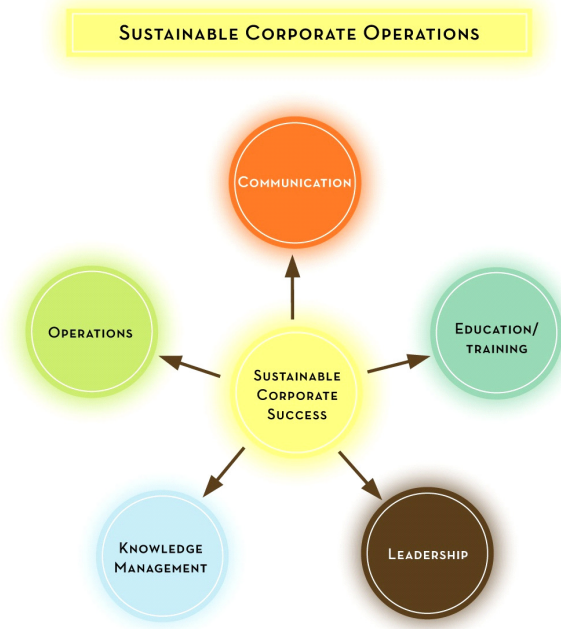
First, CEO leadership is essential to any sustainability program. Without top-level leadership, nothing much happens beyond the operational adjustments that many firms are making to respond to higher energy prices and a greater focus by local governments on green issues. Particularly in this time of retrenchment in the development industry, it is important for key employees to know that the CEO regards sustainability as essential to the organization's future, and that employees should be spending time on this initiative. For Sonae Sierra, CEO Portela made environmental responsibility a cornerstone of the company's development program quite a number of years ago.

Second, there needs, from the outset, to be an active communications program, both inside and outside the organization. Regency's CIO Smith provided external communication to investors and Marketing Vice President Whitney Kantor provided leadership in creating the "GreenGenuity" brand and communicating the sustainability initiative both within the organization and to the general media.

Third, the organization needs to commit to education and training of its employees. In the case of Regency, Mark Peternell, the new Vice President of Sustainability, is undertaking this program. For Multi, Technical Director Rehorst has led the way by engaging the country managers to become advocates for the program through a training and monthly learning program. For Sonae Sierra, training its people in the ISO 14001 system was a critical element in gaining acceptance for the system.

Fourth, the organization must be determined, from the beginning, to capture the "lessons learned" through its attempts to build certified centers and to create green

Figure 12-2
Key Elements of Successful Sustainability Programs



operations programs for existing centers. The organization needs to capture cost data and determine which of its existing design consultants, contractors and vendors are most cooperative and knowledgeable about sustainability issues.

Finally, the company needs to green its own operations. This means engaging employees with “personal sustainability” projects, reducing overall fuel use, perhaps buying carbon offsets for travel, implementing environmentally preferable purchasing programs, supporting employee car sharing and public transit use, and a host of other programs that show a strong corporate commitment to sustainability.

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