

A Natural Step on the

by Justin Sornsin & Peter Schwartzman

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To achieve global sustainability, one must have a framework from which to start. One visionary from Northern Europe has provided us a potentially viable one with tremendous implications for governments, businesses and communities the world over. Its track record so far has been so successful that it is beginning to redefine the way we do things.

Sustainability is a catch phrase for a contemporary, forward-thinking concept deeply rooted in environmental values and stewardship. By definition, it entails simultaneously conducting individual lives and society as a whole in a manner that meets all people's 'needs' without compromising the ability of future generations to meet those needs. Although a human-centered concept, it implicitly requires that considerable attention and care be paid to all Earth's inhabitants. Sustainability is much more than an ideology geared toward minimum impact on the environment. It is simultaneously: (a) a systematic way to ensure the integrity of global resources in perpetuity; (b) a means to end the continued heedless and ecologically damaging practices of modern society; (c) a holistic vision or framework concerning our species' role on the planet; and, (d) an insurance policy for our children and their children.

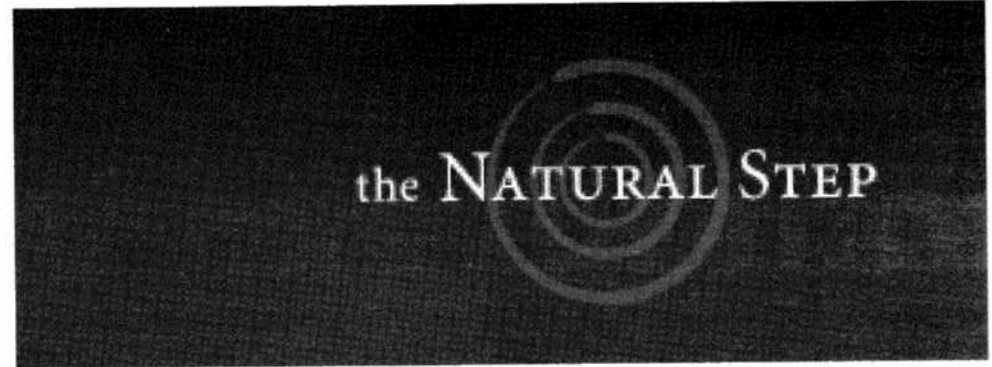
While there is a great deal subsumed in the term sustainability, rhetoric alone does not demonstrate the intention and practicality of this philosophy. Rhetoric alone also does not ensure the integration

of sustainable principles and practices into the fabric of everyday human life. And, herein lies the problem. Theory without practice results in a status quo mentality. It takes action to truly make a difference in the relationship our species has with the planet. One organization, hailing from the nation of Sweden, embodies the goal of achieving a sustainable future between humans and nature.

The Natural Step (TNS) is a non-profit advisory organization and think tank that works diligently to actualize sustainability internationally through corporate, individual and collective consciousness raising. Its work is at the forefront of promoting efficiency while also upholding progressive and compassionate social values as means to a just, secure future. In less than two decades, TNS has demonstrated its powerful impact. Here we exemplify this impact via a diverse group of case studies. This real and tangible evidence serves as an inspiration to all global communities and citizens fighting for a sustainable future.

Before we get to these cases, let's look at the organization more directly. TNS holds corporate offices in nine countries, including, Australia, Canada, Israel, Japan, New Zealand, South Africa, Sweden, the United Kingdom, and the United States. Yet, to whom and what does TNS owe its beginning? Founded in 1989 as the brainchild of Swedish physician Dr. Karl-Henrik Robert, TNS developed central principles in response to growing concerns over public health problems associated with increased toxin concentrations in the environment as well as ineffectual social resource practices. Consequently, Dr. Karl-Henrik, a leading Swedish oncologist, and fifty other Swedish scientists developed the TNS framework which included "the basic knowledge of the earth's functions and how humans interact with it" (TNSW). With the formation of this consensus document, which was sent to every household and school in Sweden, The Natural Step was born.

TNS's innovative and holistic approach has made it successful. TNS serves as a tool for decision-makers and common citizens by providing "a practical set of design criteria that can be used to direct social, environmental, and economic actions" (TNSW). The Natural Step's science-based



principles are engineered to invoke the integration of sustainable development in a wide range of sectors, from the most complex and largest businesses to small local community citizens. The following four principles serve as the TNS's basic prerequisites for a sustainable society:

1. Substances from the earth's crust must not systematically increase in the biosphere.

2. Substances produced by society must not systematically increase in the biosphere.

3. The physical basis for productivity and diversity of nature must not be systematically diminished.

4. We must be fair and efficient in meeting basic human needs (TNSW).

These conditions are simple but they are revolutionary compared to the current activities of the vast majority of businesses and corporations. While many consider these goals too "utopian" in scope, many companies have still begun incorporating them, albeit not without challenges.

So where has TNS made its mark? Lots of places. Take for example the LF Insurance Group of Stockholm, Sweden. In 1996, it sponsored TNS training sessions for its 4,000 employees. This effort brought forward suggestions for ways LF could reduce the environmental impact of its operations. With the help of its employees, LF made changes in its paper usage and recycling options and also disseminated educational information concerning other impacts the workers were having on the environment. Additionally, a new position was formed within each LF Group that is directly responsible for environmental issues including direct information sharing with their employee base. TNS continued its close work with the LF Insurance Group,

and, in 1999, it created a CD-ROM-based environmental education program that employees were encouraged to examine.

LF Miljo, an offshoot of the larger LF Insurance Group, took TNS's influence further and created the world's first recycling insurance. In a truly avant-garde move, new Swedish environmental standards hold the manufacture, importer, or retailer ultimately responsible for its products after being discarded by the consumer. LF Miljo converted this recycling cost into a small, manageable insurance premium by an initial payment system that ensures the recycling of the product even before its purchase. Products are dismantled and recycled after each "use." This rewards companies who are most responsible from the beginning, because the more a company uses durable, reusable materials in the production stage, the less cost it suffers during the recycling stage. Companies receive premium discounts for better-managed recycling programs, thus saving time and money, while ensuring a definite market share as well.

The benefits of the recycling insurance are many and have been particularly positive in the computer and telephone industries. TNS initiatives in these areas have produced a direct benefit in LF cleaning cost savings of ~\$71,000 per year. Another very important part of these advantages derives from satisfied employees who see the impact of their initiatives. Company morale has improved dramatically and LF employees continue to develop ways to further integrate sustainability into their corporation (Nattrass *et al.*).

Another prime example of benefits from TNS integration involves the world's largest furniture provider, IKEA, headquartered in Humlabaek, Denmark and owned by the

GREAT WEDDING MEMORIES

path to sustainability

Dutch foundation Stichting Ingka. IKEA is one of the big players in the international furniture industry. In 1997 alone, its worldwide sales reached \$7 billion as a result of its 14 major distribution centers and 2,300 suppliers in more than 64 countries. IKEA's recent move towards adopting TNS principles was a long time coming. IKEA hit an "environmental wall" in 1981 when encountered an aggressive public campaign due to its non-compliance of a law regulating formaldehyde emission off-gassing in particleboard production. IKEA was fined by the Danish government and the matter severely tarnished the company's image; sales dropped 20 percent in the Danish market alone. In the late 1980s, IKEA again became the focus of public scrutiny and criticism for its poor environmental record. It was engaged in the use of PVCs (polyvinyl chloride) as a key producer of wasteful color catalogs (requiring the felling of trees and the introduction of chlorine bleach residues into the environment). The public response to these environmentally unfriendly activities forced IKEA to realize the importance of these concerns. Yet, despite incremental steps, more than ten years later, in 1992, IKEA's globally popular "Billy" bookshelf unit was uncovered to be over the legislative limit for formaldehyde emissions; an "oversight" which cost the company over \$7 million to correct. Not surprisingly, and deservedly, IKEA again received negative coverage for its lackadaisical commitment to environmental standards. After these repeated onslaughts by the Danish government and the international community, it became clear that IKEA needed to quickly develop a "green" corporate conscience. Chair of IKEA Ingvar Kamprad realized that if "environmental problems such as pollution and health effects are becoming more of a worry for everyday people, they must also be a concern for IKEA" (TNS OCS). The company established an environmental task force in the early 1990s to help formulate better management strategies to lessen the its ecological impact and analyze areas of improvement. Although IKEA was experiencing tremendous profits through furniture sales, it was evident by Karl-Olof Nilsson, Group Staff Rep for Environmental Affairs at IKEA, that they were perhaps properly known as "environmental gangsters" having produced and distributed over 3 million cubic meters of material in just one year (all eventual components of the growing waste stream). Through the integration of TNS principles into IKEA's production and distribution, the company was able to stop turning "resources into waste" and begin the process of achieving sustainability in the furniture industry.

A few steps were required. The first step involved educating its nearly 20,000 employees in environmental impact issues as well as a new Eco-Plus product line—one that incorporated environmentally-advantageous components. Midway through the Eco-Plus development, however, it became apparent that simply taking 15 to 20 percent of IKEA's 10,000 product lines and making them sustainable would be have a negligible impact in an effort toward reaching true corporate sustainability. Simply stated, company-wide changes would have a greater impact than producing 10,000 "eco-sofas."

Fittingly, IKEA went to even great lengths to integrate TNS principles. It adopted a "small green steps" operational model to facilitate step-by-step changes toward sustainability. IKEA initiated a product-lifestyle analysis and worked to

understand systematic ways to improve the environmental performance of their products and those who use them. Concepts of dematerialization, "design for disassembly" and producer responsibility (for recycling) circulated and resulted in improvements in the production and distribution of IKEA product lines. Since most of IKEA's products are made of wood, sustainable forestry practices have also been explored within the TNS framework as the company has worked with the Swedish Forest Stewardship Council to ultimately change its use of wood in production to sources only from sustainably managed forests. Because of its commitment to TNS and sustainability, North America's IKEA division partnered up with the EPA and through a combined effort avoided the release of 4,576,818 pounds of CO₂, 17,336,606 grams of sulfur dioxide, and 6,656,530 grams of nitrous oxide emissions into the atmosphere—equivalent to planting 982 trees, removing 482 cars from U.S. roadways, and preventing the combustion of 313,500 gallons of gasoline. Additionally, IKEA partnered with the EPA and their Green Lights Program to lower electricity use. As of November 1998, IKEA had reduced its kilowatt demand by 781 units and their hourly usage by 3,419,016 hours (TNS OCS). Clearly, through the implementation of TNS, IKEA epitomizes the benefits possible through a long-term commitment to improving the overlapping spheres of corporation, community, and environment.

Not surprisingly, TNS has also helped other enterprises throughout the world. The following examples establish that TNS is having a broad-based impact on governmental and private sectors. They represent the truly positive influence and relevance of TNS on achieving a balance between ecologic and economic prosperity.

The University of Texas Health Sciences Center used TNS to develop sustainability initiatives through retrofitting lighting projects, carpet installations, an expanded recycling program, a comprehensive energy plan, and an integrated pest management program. Their new Nursing and Biomedical Sciences building was researched, designed, and built with green principles in mind, producing a tremendously efficient and human friendly educational research facility conducive for high levels of employee productivity (UTHSC).

Principles of TNS were also highly involved in Progressive Investment Management's establishment of Portfolio 21—the first U.S. mutual fund that screens its companies for sustainability practices for its eco-friendly investors. The companies represented in these funds demonstrate superior environmental strategies dealing with cleaner energy sources and ecologically superior product lines while balancing human health with nature.

Sweden, a Scandinavian country with nine million residents and in some ways the mother of TNS, also has benefited greatly from TNS. Sweden is often hailed as one of the first countries to admonish wasteful practices in government and industry and has historically taken major steps toward lessening its impacts on the environment. In many ways, Sweden leads the world in integrating sustainable practices. Yet, many don't recognize how they have achieved this exalted status. TNS has had played a role in Sweden's development and implementation of large-scale alternative energy projects, progressive agriculture, use of newly-emerging safer technologies,

and improved waste and transportation management strategies. TNS was so well-conceived from the beginning and so unwavering in its ideals that Sweden's King Carl Gustavus XVI has provided it needed financial and political support since the late 1980's; South Africa's Archbishop Desmond Tutu is also a TNS patron.

In 1999, The Natural Step received the Millennium Award for International Environmental Leadership by Global Green USA, the American affiliate of Green Cross USA. Green Cross International President Mikhail S. Gorbachev praised TNS for embodying "a new system of values," one where the unity between humankind and nature and the ethic of global responsibility is paramount. The governments of Hungary, South Africa, New Zealand, and several U.S. states are just a few more of the many political entities that have utilized TNS.

TNS has achieved its success, in part, by holding conferences in major cities around the world. At these conferences, as a symbol of TNS's dedication to furthering sustainable practices, participants are encouraged to bring only an "open mind," rather than a check book. These conferences provide for vigorous and active questioning and participant involvement, providing a common platform for information exchange, consulting large-scale corporate initiatives, framing sustainable development around strategic planning and implementation. Given its success, TNS serves as an example for other nations, communities, businesses and individuals to consider and emulate. It embodies a top-down approach to achieve its goals. Changing the ways companies organize their products ultimately has just as much hazardous (or beneficial) impact as grassroots changes do. As governments, communities, corporations, and individuals begin recognizing the need for sustainable development in the 21st century, The Natural Step's biocentrically-grounded framework will continue to provide effective suggestions in balancing societal activities with the health and continuance of the natural world. The Natural Step provides



an institutional philosophy for improving our lives and ensuring the lives of future generations. Its future is bright. It is not only enlightening agencies across the globe about the real possibility of a sustainable future. It is also giving hope to individuals and providing clear evidence that corporate philosophies can exist outside the realm of greed and the destruction of the environment.

REFERENCES:

Natgrass, Brian, Mary Altomare & Brian Najrass. (1999). *The Natural Step for Business: Wealth, Ecology and the Evolutionary Corporation*. New Society Publishing, 222 pp.

TNS OCS. (1999). "Organizational Case Summary: IKEA." *The Natural Step*, 10 pp. Available in pdf form at:

<http://www.naturalstep.org/learn/docs/cs/case_ikea.pdf>

TNSW. (2003). *The Natural Step Website*. <<http://www.naturalstep.org>> Accessed: December 3.

UTHSC. (2003). *University of Texas Health Sciences Center's Website*. <<http://www.uth.tmc.edu/ut/>> Accessed: November 28.

Organizations to Contact: The Natural Step, (415) 318-8170, <http://www.naturalstep.org/>

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