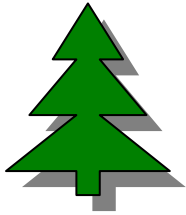


SUSTAINABILITY TIMES

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Sustainable Corporate Actions



If you have been reading our newsletters for a while, you know that **Zero Waste Operations - Research and Consulting** defines sustainability as acting in both environmentally and economically sustainable ways. Such actions do not reduce the ability of future generations to meet their needs,

while at the same time they provide the organization with the opportunity to maintain financial security in the long run. We strongly believe that clever companies of all sizes and types can transform themselves into long-living, thriving, and competitive entities by developing and maintaining a culture of sustainability. In order to develop such a culture, it is absolutely necessary to get the connection between environmental sustainability and economic sustainability. Let's think about what types of actions are both environmentally and economically sustainable. A couple of good examples should make the point.

WalMart

While WalMart's business is retail of the highest magnitude, it is also a major distribution organization. Getting all those products to all those stores is a logistics problem of incredible complexity. By purchasing and installing small auxiliary power units in the company's fleet of trucks, operators no longer need to idle the trucks' engines in order to warm or cool the cabs during mandatory 10-hour rest breaks. Imagine all the pollution and greenhouse gases those thousands of trucks produced day after day. By making this change, the company reduced its carbon dioxide emissions by the amount that would be produced by 18,300 passenger cars. So this action meets the environmentally sustainable criteria, but what about economics? Not running all those truck engines saves fuel worth about \$26 million per year.¹ This annual payback helps ensure that WalMart will be profitable for many years to come.

Interface Flooring Systems

Interface is a leading manufacturer of industrial carpeting. In the mid-1990's the company made a significant commitment to achieving full sustainability in its operations. Many initiatives have resulted from this commitment. In 1995, the company established a program to engage employees in "identifying, measuring and eliminating waste in [the company's] manufacturing processes." Aspects of both Lean Production Systems and Green Production Systems were included. The result has allowed the company to "minimize material usage and improve the efficiency of ... equipment and processes" and to reduce waste cost per unit of product by 50%, saving a total of \$372 million to date.²

What company wouldn't like to save \$26 million a year or \$372 million in less than 15 years? These examples show that environmentally sustainable actions can be very good for the company's bottom line.

¹ Diamond, Jared, "Will Big Business Save the Earth?", *The New York Times*, 12/6/09.

² <http://www.interfaceglobal.com/Sustainability/Sustainability-in-Action/Waste.aspx>



Wind Power Growth in America

The Stimulus Bill supported record growth in installed wind power in the U.S. during 2009. The American Wind Energy Association announced last week that 9,900 megawatts of wind power was installed in 2009, an 18% increase over 2008. Wind power now accounts for just under 2% of total electrical energy in the U.S. Industry watchdogs believe less wind power will be installed during 2010 because orders for new turbines have declined due to the recession. By comparison, the EU currently receives over 5% of its electrical energy from wind, with Denmark receiving 20%.

Mouawad, Jad, "Wind Power Grows 39% for the Year," *The New York Times*, 1/26/10.

Did You Know ... ?

California recently passed the nation's first mandatory green building law. This law, which takes effect in January 2011, requires that every new home, commercial structure, and public building reduce its use of water to 20% below current codes. The law is expected to also help California meet tighter standards on the production of greenhouse gases and help the state meet its 2020 goal of getting one-third of its electric power from renewable resources.

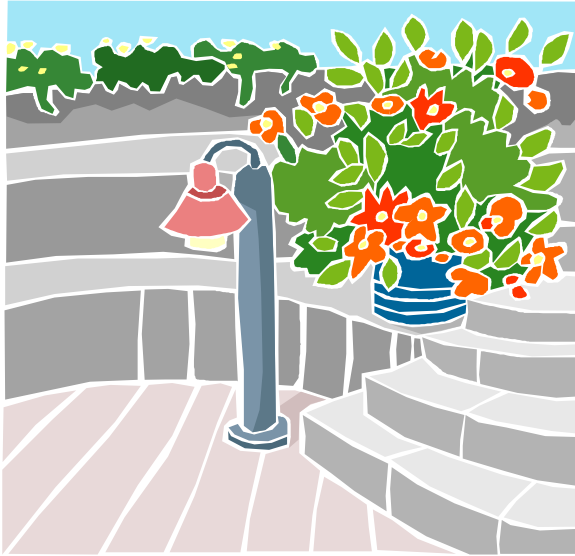
Los Angeles Times' Greenspace blog, 1/14/10.

Book Review

Confessions of a Radical Industrialist: Profits, People, Purpose -- Doing Business by Respecting the Earth

by Ray C. Anderson and Robin Wright

Ray C. Anderson is founder and CEO of Interface Flooring and he truly is a radical industrialist. His company's commitment to sustainability is surpassed by none. In this book co-authored by Robin Wright, he shares much about his personal and professional commitment and addresses powerfully the relationship between a company's financial success and its environmental impacts. Read *Confessions of a Radical Industrialist* (St. Martin's Press, 2009) to solidify your understanding of the close relationship between environmental sustainability and economic sustainability. You'll put the book down a true believer and you will have gained insights and ideas about how to transform your own business to one of full sustainability.



Waste Reduction Technique of the Month

Green Roofs

Roofs are an often overlooked portion of the built environment. Every home, store, school, hospital, factory, and business has one (or many). Roofs may leak heat or cooling to the surrounding environment. They may leak storm water into the building interior. They may require expensive repairs or replacement periodically. Other than this, they may be ignored by owners and they are

rarely thought about as untapped resources. But these areas may be holding a key to environmental sustainability and economic sustainability. At the same time, they may be used to enhance our life styles.

Consider transforming the forgotten rooftop into a vegetable garden or a small paradise above the hustle and bustle of the urban landscape. Known simply as a "green roof," such development of rooftop space can have several advantages:

- Adding soil and plantings to a roof is very effective insulation, reducing up to 20% the heat loss or gain that may occur through the traditional roof.
- Growing plants pull CO₂ out of the air and thus act as a cleaning agent to reduce greenhouse gases in the atmosphere. Similarly, since plants release oxygen into the air, they can transform dirty urban air into clean, healthy air.
- Plants absorb rainwater rather than releasing it in torrents onto streets and sidewalks and into storm sewer systems. Rooftop succulents are particularly adept at this action.
- Rooftop gardens may be used to produce fresh food for city dwellers, school lunchrooms, restaurants, or even corporate cafeterias. This provides excellent food product for a fraction of the cost of purchasing it commercially and eliminates the greenhouse gases produced during transportation.
- Attractive patio areas can be placed on rooftops to allow residents or employees a quick, easy escape from the stresses of the day.
- Green roofs tend to outlast conventional roofs as they do not deteriorate from exposure to sunlight, rain, or snow.

One great challenge of the Twenty-First Century is feeding of the billions of humans occupying the world. Typically when land is developed for housing and business, it is lost to agriculture, but smart planning and changes in our cultural habits can reduce the impact of urban development on future agriculture. And, who knows, maybe one day we will see wheat being harvested from warehouses in the Midwest and strawberries growing atop large factories in Florida.

Is the U.S. Doomed to Be Second-Rate?

By Paul McCright

In his January 28th "State of the Union Address," President Obama noted that China, Germany, and India are working hard these days to try to become number one in alternative energy industries. In this context, he chided Congress for its lack of progress in charting a course for America to aggressively pursue leadership status in these industries. We compliment the President for having the political guts to directly confront the inability of the present Congress to develop and pass meaningful legislation to support the future growth and development of these important industries within the U.S.

President Obama firmly stated that he is not ready to accept "second place" for our country. We are already in second place or lower in terms of percentage of electricity produced by wind power (the European Union) and by nuclear energy (France) and by hydro power (Brazil) and by geothermal energy (Iceland).

The EU and Japan have had high-speed trains for years. China has just opened a lengthy high-speed train line and is working on many more. We are far behind these countries.

Even in the current economic slump, we are the richest economy in the world -- for now anyway. This number one ranking is because of a combination of great natural resources, a large unified market, the capitalist and democratic society, and a high level of innovation and hard work by our citizens.

Are we doomed to slide into second-rateness in important industries?

We think not. We need to learn to carefully and effectively use our great natural resources. We need to use our democratic society to free up the capitalist society and to encourage innovation and hard work. What seems to have happened over the past decade or more is that America has lost its way in terms of making sound and realistic decisions about how to better manage our economy for its long-term sustainability.

Fixing our economy means investing in future industries and reducing our dependence on dying industries or those that are spending the opportunities of our children's and grandchildren's generations. Fixing our environmental problems requires the same actions. We Americans certainly can do it. Will we?

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