

Tackling Global Warming Stonyfield Farms' Environmental Cookbook: One Company's Approach

Human activities are changing our planet's climate by emitting heat-trapping greenhouse gases into the atmosphere - including carbon dioxide (CO₂), methane, and other gases. Our present use of non-renewable fossil fuels such as oil, gas, and propane is a major contributor of greenhouse gases.

The good news is that climate change due to human activities can be reversed if we take action quickly. Many people and companies are beginning to consider what action they can take. If there were any doubt, consider the words of the CEO of British Petroleum (no raving tree-hugger!):

The time to consider the policy dimensions of climate change is not when the link between greenhouse gases and climate change is conclusively proven, but when the possibility cannot be discounted and is taken seriously by the society of which we are a part. We in BP have reached that point. It is an important moment for us. A moment when analysis demonstrates the need for action and solutions.

Reducing our own use of fossil fuels through energy efficiency is a starting point. We can also "offset" our emissions by investments in projects that remove the carbon from the atmosphere or

prevent its generation, such as renewable energy, energy efficiency, forest protection and reforestation. Because of global air circulation, the carbon released from fuel combustion in one place can be offset by a renewable energy or forestry project anywhere in the world.

Taking action need not be traumatic or costly. It does, however, require analysis. Sooner or later, we all will have to take action, and it may not be to our liking.

Stonyfield Farms, a New Hampshire yogurt producer, is a case study of what can be done. Two years ago they decided to take action. The use of non-renewable fossil fuels and the generation of CO₂ were identified as the main issue they should tackle. Goals were set to reduce energy use and to convert to renewable energy. The target was to reduce or offset 100% of the CO₂ emissions from their production facilities by the year 2002. The goals were met in 1997.

Stonyfield Farms' CO₂ mitigation offers a model that could be used by others. They have published a document that gives a summary of the global climate change issue and lays out an action plan business can follow. Their approach is a six-step process.

1: Reduce on-site emissions

Reduce energy use and/or switch to non-carbon emitting renewable fuels. Manufacturers and fabricators can take many actions in this regard for their in house processes. Builders should encourage and feature energy efficient designs.

2: Define offsets

Carbon offsets are activities that either remove existing carbon from the atmosphere or prevent additional carbon from being released into the atmosphere. Offsets are 'off-site' activities that do not directly involve a corporation's own emissions. Stonyfield's approach was to support reforestation projects in Oregon. Other projects that achieve similar goals could include solar rural electrification, urban tree planting, etc.

3: Determine your "carbon footprint"

A company's total "carbon footprint" is more than just energy use. It must include the emissions resulting from transporting goods, employee travel, solid waste incineration, packaging production, etc.

In the construction and development industry it means evaluating the design impact new develop-

ments have on energy use and the environment. The embodied energy content of construction materials has to be considered and take advantage of local materials rather than importing stone and marble from halfway around the globe if local sources are available.

4: Calculate emissions

Stonyfield developed a simple worksheet based on the fact that each fuel source has a CO₂ factor associated with it. The US national average is that 1 ½ pounds of CO₂ are generated for each kWh of electricity (lower in areas with large hydro capacity). Fuel oil and diesel generate 22.4 pounds per US gallon, natural gas 120.6 pounds per 1000 cubic feet, gasoline in cars 19.6 pounds per US gallon, while air travel generates 0.8 pounds per mile.

5: Choose an offset project if that is the appropriate route

Offset opportunities can include CO₂ emissions reductions, carbon sequestration in vegetation and soils, and emission reductions of other greenhouse gases (such as reducing methane emissions from coal mines, gas pipelines or livestock).

If it takes the equivalent of 20 trees to produce the lumber used in a house, one step a builder may take is to support the planting of at least an equal number of trees in a reforestation project to offset the effect of the trees used.

The Stonyfield Farms Environmental Cookbook is posted on their website at: www.greenbiz.com/yogurt.htm

6: Choose an offset partner

Carbon offset programs are a new activity that needs careful evaluation. The quality of the project, monitoring and verification must be considered. Many programs and consultants are now emerging.

With a small financial investment, Stonyfield Farms estimate they will offset approximately 2000

tons of CO₂. The offsets will be verified with a strong monitoring system. Although Stonyfield's emissions are relatively small, the collective impact of greenhouse gas abatement by many small- to medium-size firms could be profound.

They have taken to heart the adage that the journey of a thousand miles begins with a single step. ☺

The Toxic Environment

We all have concerns about our environment, but we do not always appreciate the consequences of our life style of convenience. Many of us are affected by repeated exposure to synthetic products: furnishings, building materials, clothing, household products and food additives.

There is a mistaken idea that environmental illness results from a single exposure to an excessive amount of a toxic substance. However, most individuals are exposed for years to common chemical toxins through their water, air, food, housing, workplace, and cleaning and personal products. A continuing low level exposure can lead to chronic rather than acute symptoms. Most of us do not make the connection.

We are now learning that illnesses with symptoms that mimic asthma, chronic fatigue, arthritis, fibro myalgia, and many others may not actually be those diseases but something else, usually triggered by environmental factors. This growing awareness is stimulating the research and promotion of healthy housing ideas. Responsible builders should become familiar with the products and methods they use in building, to ensure the home environments they build are healthy.

Most books on the subject have been written by people who have first-hand experience with the issue, and deal with the solutions that worked for the authors. A more chilling tale is the trauma sufferers go through before diagnosis is made. The process can be a long and traumatic series of tests. When all test results are negative, the sick person is often assumed to be mentally unbalanced simply because there is no concrete evidence of illness.

In many ways the medical community mirrors what society expects. Rather than rely on the diagnostic ability of the physician, they are programmed to look for a quick fix, a potion or elixir that will provide quick recovery or improvement.

The Toxic Labyrinth is a book that documents Heather Millar's story. As a nurse, she saw the

situation from an insider's point of view, knowing some of the questions to ask and medical procedures to question. This is an excellent book of one individual's progress through the medical system until diagnosis of environmental illness is established. No products, facilities, or health care professionals are mentioned by name. Rather, one person's experience is presented to show that there is assistance available.

Healthy people find it difficult to appreciate the true impact of environmental illness. We are highlighting this book because it provides a unique point of view. It may be helpful for someone who is suffering but whose doctors are not able to diagnose the illness. It could be someone in your family, an acquaintance, or a customer.

Heather's recovery is progressing and has led to a new lifestyle. She has established a business to provide resources and assistance for those who are suffering from environmental illness. This includes the development of a text for use in nursing schools (interest has been shown in B.C. and Saskatchewan) and consulting services for individuals. ☺

The Toxic Labyrinth, a family's Successful Battle Against Environmental Illness
by Myrna Millar and Heather Millar
Available from the publisher for \$17.95 plus S&H & GST:
Nico Professional Services Ltd.
Tel: 604-733-6530
Fax: 604-733-6506

Peppers - Secret Pest Repellent of the Future?

Instead of poison or traps, researchers are trying another weapon to fight pests - the world's hottest chili pepper.

A repellent developed by the New Mexico Tech Research Foundation in Socorro, NM has tapped the power of the red habanero pepper, which is 60 times hotter than its fiery cousin, the jalapeno, and 10 times hotter than cayenne.

The spicy ingredient is being mixed into caulks, paints, glues and rubber-coating materials, and any creature, mammal or mollusk, unfortunate enough to take a nibble will get a sizzling surprise. ☺