



Board of Directors

*Brian Bass
 Colin Duncan
 Scott Gerz
 Ellen Jacobson
 Suzanne Johnson
 Philip Moore
 Russ Patrick
 Deborah Redman
 Mary Winston*

SUNRISE

is a member of the Progressive Leadership Alliance of Nevada and is a chapter of the American Solar Energy Society.

We are a non-profit formed in 1996, promoting sustainable living practices that lead to a comfortable earth friendly lifestyle.


Table of Contents

- What Is Sustainability (Part Two).....2
- Home Performance – Is What, Exactly?.... 3
- Events Calendar..... 4

Contact Information

P.O. Box 19074
 Reno, NV 89511-0837
 info@sunrisenevada.org

Copyright 2007 Sunrise Sustainable Resources Group, All Rights Reserved

 Printed on 50% PCC recycled paper

Letter from the President

The truths of global warming may be inconvenient at times, but the opportunities are exciting. The international awareness regarding climate change is spreading over the globe, and many of those who stuck with their “world is flat” beliefs have now accepted what scientists have been telling us for years. Some may be loath to accept that our civilization must now in some ways alter how we consume. However, many welcome this new enlightenment as the first day of a Vibrant Spring. And throughout this Vibrant Spring will be a whole new exciting range of opportunities. The opportunities for new jobs – in renewable energy construction or renewable energy manufacturing. The opportunities for new college programs and degrees – in renewable energy home and business design or energy efficiency management. The opportunities for new retailing – products such as

electric cars and trucks, solar water heaters, efficient solar/PV cells. The opportunities for saving money – home-grown electricity, home-grown heat, and home-grown fuel for electric cars. The opportunities for greater national security – individual building energy generation instead of huge centralized power plants that are easy to attack and destroy, and cutting loose those foreign oil shackles that have bound our nation for too many years and too many wars. And perhaps the most important opportunity of all – the opportunity for your children and their children to live in a safe and healthy world, where they can breathe clean air, drink clean water, and not have to worry about living the next day. A Vibrant Spring and all of its great opportunities await us...we simply have to open the door and walk through it.

Brian Bass
 President

Gerlach is Going Green!

One of the most exciting projects in our area this year is the effort Sierra Pacific and Burning Man (yes, that’s right) are putting together to make the city of Gerlach, Nevada carbon neutral by 2010. This effort will include energy efficiency, conservation, and renewable energy generation and is intended to showcase what can be done, albeit on a small scale, to reduce or eliminate the carbon footprint of cities and towns anywhere.

The first step to making Gerlach carbon neutral will be an energy conservation effort April 25-27, 2007. Sierra Pacific (including their Senior Power, Refrigeration Recycling, Change-A-Light and other utility programs) and Burning Man staff

will be on hand to retrofit existing homes and business in Gerlach to make them more energy efficient. They have several homes and businesses signed up so far and are putting the word out to get more in the community involved.

The next step will be the installation of donated PV systems throughout the town of Gerlach (and in Lovelock as well). Up to 300 Kilowatts of PV systems are planned to be installed this year through Burning Man and rebated through the SolarGenerations Rebate Program. Up to ten separate PV systems may be installed on schools, businesses, firehouses, community centers, and hospitals in the two towns. *(continued p.2)*

What is Sustainability (Part Two)

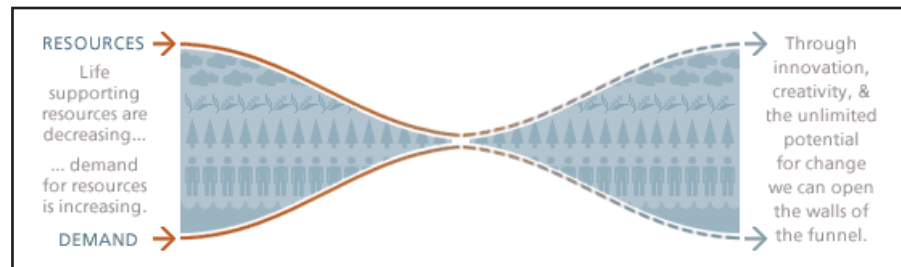
The Natural Step's Four System Conditions

1. In order for a society to be sustainable, nature's functions and diversity are not systematically subject to increasing concentrations of substances extracted from the earth's crust.
2. In order for a society to be sustainable, nature's functions and diversity are not systematically subject to increasing concentrations of substances produced by society.
3. In order for a society to be sustainable, nature's functions and diversity are not systematically impoverished by physical displacement, over-harvesting, or other forms of ecosystem manipulation.
4. In a sustainable society, people are not subject to conditions that systematically undermine their capacity to meet their needs.

No problem can be solved from the same level of consciousness that created it

Albert Einstein

In the last newsletter, we began a discussion on what sustainability is, and portrayed the The Natural Step's Four System Conditions, developed in 1989 to offer a way to look at the systemic problems we've created. The stylized graphic is of a funnel – the metaphor TNS use to describe our predicament. If one thinks of the walls of a funnel as narrowing down, then if we speed into that funnel at our regular pace, the walls soon constrict our movement, probably to



© The Natural Step

a standstill – but, by applying sustainability principles to our behavior, that constraint we feel can be opened up towards a better world. At that point, it does not matter what pace we are at, as long as we are in alignment with the way the world actually works . . .

In those system conditions, the word “not” is very important, because once we learn how we are overusing our resources, we then simply insert the word “not” in front to represent how to think about what we are doing to the Earth. . .

In this way it becomes a simple and elegant way to say, for example, “if we systematically subject ourselves to increasing concentrations of substances extracted from the earth's crust”, then we can NOT continue to drill for oil, mine for aluminum (that is not continually recycled once here), and destroy whole mountains just to get a few ounces of uranium, as we are then subjected to its' radioactive toxicity way beyond any rational use we may get for 'now'.

Each of these system conditions is an accurate filter, being science-based, to then guide one's way to a sustainable society, regardless of culture, geography, language or politics . . . A true universal paradigm for a better world . . . All of these points will be expanded upon as we continue to educate as to the true meaning of sustainability and how it applies to your life.

Garry Bowen, Principal, Markettexture, Member AIA Sustainable Design Assessment Team

Gerlach is Going Green! (continued from page 1)

Sierra Pacific and Burning Man are looking for volunteers to help out with both the energy conservation work in April as well as the PV installations later this year. Individuals interested in the energy conservation work should contact Karen Foster at (775) 834-5683 to be registered prior to the April event. Assistance with design and installation of the PV systems is also welcome and comes with a great bonus for PV professionals! SolarGenerations and Truckee Meadows Community College are teaming up to provide low or no-cost North American Board of Certified Energy

Practitioners (NABCEP) certification to professionals that agree to help out with the Gerlach and Lovelock installations. As there are only two NABCEP certified installers in Nevada now, this is a great and low-cost opportunity to get this essential certification. All individuals and professionals should register at SolarGenerations.com to get the latest information on the upcoming events.

So, lets all lend a hand to make Gerlach green and show the world what can be done!

Philip Moore, Sunrise Secretary

Home Performance – Is What, Exactly?

Homeowners tend to think that drafts, cold or hot rooms, high energy bills and other comfort and durability problems are “normal”. Untrue. These conditions indicate that the home is sick and fails to PERFORM the way its occupants have a right to expect that it to.

Home Performance Contractors or Professionals look at a home differently than standard contractors do. They see the house as a system and look for indications that all is not well. They’ll ask you how you experience your home. Are there foggy windows, mold, peeling paint and other symptoms?

They also test. You wouldn’t expect your doctor to diagnose and treat a serious condition without conducting some tests, would you? But we routinely expect contractors to solve our comfort, indoor air quality, building durability and high energy use problems without any sort of testing at all. The problem is that most contractors are limited in the scope of their expertise and do not have the knowledge and tools to assess a building as the complicated system it is.

A Home Performance Contractor uses a Blower Door to measure ventilation rates and find holes in the building shell. They’ll use an infrared camera to assess the efficacy of wall and ceiling insulation. They will check for health, safety and efficiency issues with the heating system. In short, all the interactions of the building itself, its mechanical systems and the activities of its occupants form the basis for remediation – not guesswork!

Every house presents a unique set of conditions, but some of the most common problems Home Performance Contractors find are as follow:

Air leaks from the building shell through recessed lights, dropped ceilings, wire, pipe, and fixture penetrations in the ceiling. Heat rising and escaping through these holes cause cold air to be drawn in through lower level cracks – including from your crawlspace. (Standard recessed lights alone can lose from \$5 to \$30 each in energy every year!).

Typically, duct systems lose 30% of conditioned air to attics and crawlspaces. Leaking ducts also pick up pollutants – dust, soil gases, insulation fibers and mold spores and conduct them into the living space where we then inhale them. Seal the ducts and reduce energy loss and improve indoor air quality to boot.

Poorly installed insulation. Only 4% edge gaps in attic insulation reduces the overall effective R-Value of the insulation by 30%. Also, contrary to popular perception, fiberglass does not stop air movement. It slows it down and filters your expensively heated air as it wafts out of your house. In order to do its job, insulation has to be in contact with the surface it is insulating, continuous and contiguous. All too often, it is none of these.

The typical heating and air conditioning system only delivers 57% of its rated BTU’s to the building it is supposed to heat and cool. Conditions contributing to this unfortunate and expensive situation include leaky duct systems, improper filters, wrong fan speed and improperly sized ducts.

If you want more information about home performance, type the words into your favorite search engine and you’ll discover many informative sources.

Mary Winston, Home Performance Professional, Energy Masters, (775) 250-9796.

The Patagonia Distribution Center is the first building in Nevada to be awarded a Leadership in Energy and Engineering Design Gold rating.

Reno Gazette-Journal, March 8, 2007

Fluorescent lamps & fixtures can payback the cost of your investment in less than three years while generating at 41% rate of return.

Home Energy Saver hes.lbl.gov

Energy Efficiency accounts for 57% of the carbon reduction needed by the American Solar Energy Society’s plan to avoid the most disastrous implications of global warming.

Tackling Climate Change in the U.S.: Potential Carbon Emissions Reductions from Energy Efficiency and Renewable Energy by 2030

Events Calendar

Earth Day
April 22

April 3, 10, 17, 24 & May 1, 2007, 5:30 - 6:30 PM

Truckee Meadows Livable Community Lecture Series – Washoe County Downtown Reno Library, Lower Level, 301 South Center Street, see www.nvapa.org for more details including lecture subjects

April 14, 2007, 10:00 AM - 4:00 PM

AIA Sustainable Design Assessment Team Public Workshops– McKinley Arts & Cultural Center, 925 Riverside Drive, see www.AIANN.org. For a final copy of the AIA SDAT report, see www.aia.org/liv_sdat.

April 14, 2007, 6:30 - 8:00 PM

Nevada Econet's Organic Wine Tasting and Silent Auction Fundraiser – Moana Nursery, see www.NevadaEconet.org

April 19, 2007, 1:00 - 5:00 PM

City of Reno Green Summit – Reno Sparks Convention Center (North Entrance) General Meeting Rooms A-1 and A-6. More information and registration at: www.cityofreno.com/res/climate_protection/summit.php

April 22, 2007

Earth Day – Come visit the Sunrise Booth! Members interested in volunteering at the Sunrise Booth can contact Philip Moore at 224-1877. See www.nevadaeconet.org/earthday

May 2, 2007, 7:00 – 8:30 PM

Smart Living Expo Lecture Series: Dr. Jay Arnone, DRI, and Dr. Joe McConnell, DRI – “From Grasslands to Greenland – What Are We Learning about Global Change” - Desert Research Institute, Stout Conference Room, 2215 Raggio Parkway, Reno - More information at www.SmartLivingExpo.com

May 3, 2007, 6:30 – 8:00 PM

Sunrise Board of Director's Meeting – Renown South Meadows Medical Center, Northview Conference Room, 10101 Double R Blvd, Reno

May 12, 2007, 8:30 AM – 3:00 PM

Northern Nevada Sustainable Community Tour – See the latest in green building, active solar, and sustainable practices in businesses, homes, and schools. Tour starts at Desert Research Institute, Stout Conference Room, 2215 Raggio Parkway, Reno. Tickets will be on sale at Earth Day, the May 2 Smart Living Expo lecture, and other locations - More information at www.SunriseNevada.org

June 7, 2007, 6:30 – 8:00 PM

Sunrise Board of Director's Meeting – Renown South Meadows Medical Center, Northview Conference Room, 10101 Double R Blvd, Reno

August 11-12, 2007

Sustainable Roundup – Minden, NV – More details to follow

October 6, 2007

Northern Nevada Solar Tour – More details to follow

**Smart Living
Lecture Series**
May 2, 7:00pm

**Sunrise BOD
Meeting**
May 3, 6:00pm

**Sustainable
Community Tour**
May 12, 2007

**Sustainable
Roundup**
August 11-12

Call for Submissions: We want to hear from you.

Deadline for the next issue is *May 25, 2007*. Please keep length of articles to 300-500 words and send to Philip_Moore@charter.net. We reserve the right to edit all submissions.