



CSL # 868816

P.O. Box 721
Nevada City, CA 95959
530-273-4422
www.SustainableEnergyGroup.com

Investing In "Green Technologies"

In the last column here in Going Green I mentioned the financial incentives available for green technologies and why you should take advantage of them while they're still available. In this column you'll learn why green technologies are far superior to conventional investments, especially given the high volatility and plummeting returns from conventional investments.

The green technologies I'm referring to aren't stocks in green companies. Instead, I'm suggesting you invest in green technologies for your own home or business. I should make a couple of important points for the record.

First, I want to point out that I've felt Solyndra was a goofy technology from the day I first heard about it. A customer of ours asked me what I thought about an article in Home Power magazine praising Solyndra, and I discouraged him from considering them (this was before the news about their problems surfaced, by the way). And from what I've read, staff in our government sent memos suggesting Solyndra wasn't a good idea but, having worked for the government in an advisory role on solar technologies since the late 1970's, I'm not surprised. Upper management may ask staff for opinions but they typically do what they want even when counseled against taking a certain course of action. I've written in the past about government accountability too, describing it as an oxymoron, but I'll leave it at that (don't get me started!).

Secondly I've also written about my distaste for the term "green", so I'm on the record on that one too. With all due respect to The Union - they came up with the title of this column - I bristle every time I hear or read the term "green". I much prefer the term "sustainable" but I'm told it's less popular and less understood. So when I use the term "green" just know that I really mean "sustainable". When I hear the term "green" I think of how used and abused it is. It's all too often used to describe products or services that fall into a category I refer to as "hippy-dippy". Most of the time it's marketing hype. Sustainable products or services are, in contrast, those that provide us with an attractive return on investment and often offer other compelling benefits such as increased comfort and improved health/safety. Sustainable products and services also - measurably - help the environment.

So with those things off my chest let's get down to brass tacks. What we can expect from the future is clear as crystal, at least in my mind. Forget about conventional investments. If you're heavily invested in them and tired of watching them "tank", consider doing what myself and so many others in our community are doing and get out while the gettin's good. Invest instead in the roof over your head or a different set of wheels in your driveway.

Is your home or business too large? Downsize now and get yourself into something more affordable (and thus sustainable). Get a place closer to town or work. Sorry, I know this isn't a technology, but it will make more and more sense to you as time passes. I'm seeing an increasing number of smart folks doing just this.

Is your transportation more than what you need, especially when it comes to what you're paying at the pump? Again, time to downsize. And get rid of those relatively useless "toys" like boats, RVs, etc that you rarely use, probably because you can't afford to use them. I'm seeing an increasing number of smart folks doing this too.

As far as what else you can do, I've written about a wide variety of sustainable technologies or services in the past. I've also written about things that are heavily hyped but offer little to no benefits, financial or otherwise. In case you've missed those articles they're archived here on my public service web site - www.TheEnergyGuy.com/Articles.html

If you don't have internet access I'll briefly mention some top contenders.

If your electricity bill is over \$100/month on average and you're not buried in the trees you should consider solar power. All of your local solar companies, including mine, offer free estimates and can tell you what sort of return on investment you'll get. We see returns of 8% for people with low bills to 25% and higher for those with high bills. Solar water heating should also be considered.

Plug the leaks in your home. You could easily be wasting a third to a half of your heating and cooling costs due to leaks in your home and ducting. Many local HVAC contractors have been tightening up duct systems all over Nevada County lately, offering rebates and measurements to show you what a difference they've made. Did you know the average duct system leaks about 40% of the air your furnace fan is moving? It's sucking in air on the return side of your furnace fan from your attic and/or crawlspace too, which is really unhealthy. And it's blowing out heated or cooled air into those areas on the supply side of your furnace fan. Who wants to pay good money to keep the bugs and other critters in their attics and crawlspaces comfy? While the "target" leakage for a duct system is 15% I'd recommend you have them seal your system down to 6% or less.

As far as leaks in your building are concerned, the worst offenders are usually accessible from the crawlspace and/or attic. In most cases the attic leaks are easiest to find and fix. At least the air leaking in around doors and windows is "fresh air"; the same can't be said for other leaks! For professional help call us or one of the many Building Performance Contractors in our area. For do-it-yourselfers here's a great source - http://www.energystar.gov/index.cfm?c=diy.diy_index

During energy audits I'll typically find just 6" or less insulation in the attic floor. Once the leaks are sealed it's pretty inexpensive to have loose fill insulation added (up to R-40 to R-48) and it's another very cost-effective retrofit.

Appliances such as refrigerators, freezers, clothes washers, furnaces and air-conditioners, also make sense to replace with new more efficient units if they're 15 to 20 years old.

There are so many more options but such limited space. Check out the Going Green article archives mentioned earlier. You're also welcome to email me and I'll usually respond within a day or two. I hope you'll understand that phone calls that aren't work related are hard on a guy trying to run a business in today's challenging economy! So, friends and neighbors, it's time to invest in the future. Let me know how I can help!

Ray Darby is President of Sustainable Energy Group Inc., a Grass Valley company offering energy efficiency and solar services for residential and commercial buildings, from comparing the alternatives through installation and servicing of energy systems of all types. You can reach him at 530-273-4422, via email RayDarby@SustainableEnergyGroup.com, or visit their web site at www.SustainableEnergyGroup.com.