## Celebrate Earth Day with your own Energy Project

By Michelle LaBrosse, PMP®, Chief Cheetah and Founder, Cheetah Learning

April 22, 2010, is the 40<sup>th</sup> anniversary of Earth Day. What better way to honor Earth Day than to develop your own Renewable Energy Project? As a project manager, you have the skills to reduce your energy costs and even become energy self-sufficient. All it takes is planning, and that's something you're very good at. Let's get started.

First, let's look at the lexicon. What's the difference between renewable energy and alternative energy?

## Renewable Energy

Renewable energy generally refers to energy sources that are natural, continuous and large, such as solar, wind, hydro, geothermal and certain biofuels.

## **Alternative Energy**

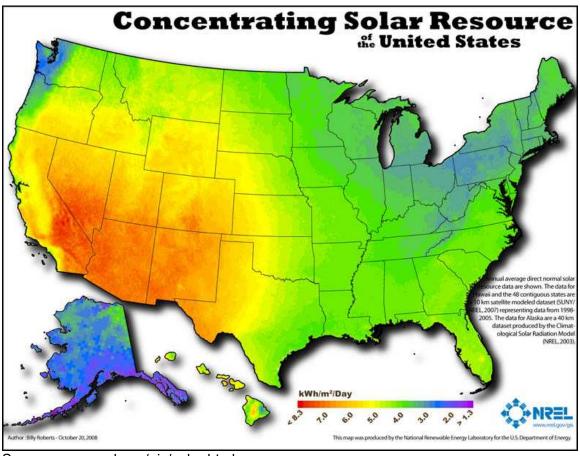
Alternative energy, in its broadest sense, is any type of energy used to replace a different source of energy. However, most often, the term is used to mean energy that has replaced another source because of negative consequences of its use. For example, when coal is used to replace oil. More recently, alternative sources have included bioenergy and biofuels such as palm oil or ethanol.

For many of us looking to reduce our dependence on traditional sources of energy, the three energy sources to begin with are solar energy, wind and geothermal. I'm going to focus on solar and wind because I've been working on both of these on two different properties I own.

## 1. Solar Energy

Solar energy is power from the sun. The good news is that once a system is in place, you have a vast and inexhaustible resource. After your initial investment, the fuel is free and will not be subject to the ups and downs of energy markets.

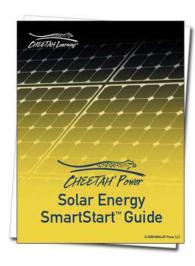
Depending upon where you live, you can calculate an average of how much energy you could produce a day. Below is a map from the National Renewable Energy laboratory that gives you a visual sense of the concentration of solar resources in the United States. This doesn't mean you have to be in the West to benefit from solar energy. (See Solar Case Study in CT on page 3.)



Source: www.nrel.gov/gis/solar.html

# Step-by-Step Guide to Solar Energy

If you'd like a step-by-step guide to getting started with Solar Energy, you can download a <u>free guide</u> from Cheetah Power, an educational resource focused on energy self-sufficiency. It breaks down all the information that you need and will help you jump-start your energy project.



## A Solar Case Study in Connecticut

I have been working the renewable energy scenarios on my Connecticut property for a year. When I started, the State of Connecticut was no longer doing the individual incentives for solar power. While I was in the process of installing a 6kw solar system, the state reinstated its program. I put my project on hold, applied for the rebate and was awarded a \$9,071 rebate for my 6KW system based on the amount of energy it's going to generate (which is pretty close to 9071 KWH per year). So, make sure you check out what kinds of incentives your state is offering.

To increase the amount of power my panels were going to create and get the maximum rebate possible, I had to chop down just one tree (in a stand of about ten other trees).

I reran my payback analysis figures based on my most recent data. It is going to cost me a little over \$28k to install the 6kw solar system, and it will pay for itself in 15 years.

Based on what else I could be doing with that money, this will generate a 4.5-times better return over 20 years than anything else I could be doing with my money right now. Even compared to the safest place to park your money – U.S. Treasuries adjusted to keep up with inflation – the solar panels still generate a 2.3-times better investment.

#### 2. Wind

Wind energy is the fastest-growing source of electricity in the world and is poised to play a major role as we move toward a sustainable-energy future. In 2008, more than 27,000 megawatts (MW) of new capacity were installed worldwide. This stands as a 36-percent increase in annual additions compared with 2007, representing \$51.5 billion in new investments. The United States installed a record 8,500 MW of wind power in 2008, capable of producing enough electricity to power more than 2 million typical homes. In fact, in 2007 and 2008, more wind power was installed in the United States than in the previous 20 years combined — a \$27 billion investment.<sup>1</sup>

So, how do you get started with wind? The first thing you want to do is a wind feasibility study. Here's how you can do one for your property.

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<sup>&</sup>lt;sup>1</sup> Source: www.ucusa.org

I am currently working on developing a wind-farm concept in Haines, Alaska. Depending on the size of the wind turbines, this wind farm can create from 9 to 18 mw of power. The town right now only uses 3 to 4 MW of power. The extra power could be used to create a hydrogen refueling station for a fleet of fuel-cell powered fishing boats at the small boat harbor. If you want to follow the status and learn along with me, visit my energy blog: http://www.cheetahpower.net/blog/.

## Want to Energize your Career Credentials? Take \$100.00 Off.

Use promocode earthday2010 and take \$100.00 off the regular tuition of our Project Energy Independence Certification. It is a 35-hour online course that teaches you how to assess your current energy usage, ways you can cost effectively and efficiently reduce your energy usage without making significant lifestyle changes, various alternative-energy options that are right for your situation and implementation strategies for your own energy self-sufficiency program that will help you create a more secure future. And, once you've done that, you've just added personal experience with sustainability to your resume. You've helped yourself personally and professionally with one course.

## **Become Your Very Own Energizer Bunny**

We've all been jealous of that Energizer Bunny and wanted some of his battery cells in our own back-pack. But what I've learned in my own exploration of renewable energy is that it has given me more personal energy and power over my destiny. You can have power over your power, too. You just need to get started. Begin your project plan, and by next Earth Day, you'll have a new success to celebrate. Power up!

## Chief Cheetah Podcast and Cheetah Fan Club

Want to hear what Michelle LaBrosse, PMP®, and Chief Cheetah has to say about energy self-sufficiency? Download our podcast at <a href="http://podcast.cheetahlearning.com/podcastgen/">http://podcast.cheetahlearning.com/podcastgen/</a> and hear the words straight from the Cheetah's mouth. Or visit Cheetah's fan club on Facebook at <a href="http://www.facebook.com/pages/Cheetah-Learning/252859238455?ref=nf#/pages/Cheetah-Learning/252859238455?v=wall&ref=nf">http://www.facebook.com/pages/Cheetah-Learning/252859238455?v=wall&ref=nf</a> for a daily Cheetah Tip to Keep You Tops.

### **About Cheetah Learning and the Know How Network**

The Know How Network is a monthly column written by Michelle LaBrosse, the founder and Chief Cheetah of Cheetah Learning. Distributed to hundreds of newsletters and media outlets around the world, the Know How Network brings the promise, purpose and passion of Project Management to people everywhere. Visit <a href="www.cheetahlearning.com">www.cheetahlearning.com</a> to learn more about Cheetah PM, the fastest way to learn about Project Management and get your PMP. You can also get your career in gear with <a href="CheetahWare">CheetahWare</a>, free Project Management tools.

## **About the Author**



Michelle LaBrosse, PMP®, is an entrepreneurial powerhouse with a penchant for making success easy, fun and fast. She is the founder of <u>Cheetah Learning</u>, the <u>author</u> of the <u>Cheetah Success Series</u>, and a prolific <u>blogger</u> whose mission is to bring Project Management to the masses.

Cheetah Learning's expertise in project management is highly regarded in the industry. Honored by the Project Management Institute (PMI®), Cheetah Learning was named Professional Development Provider of the Year at the 2008 PMI® Global Congress. A dynamic keynote speaker and industry thought leader, Michelle was previously recognized by PMI as one of the 25 Most Influential Women in Project Management in the world.

Cheetah Learning is a virtual company with 100 employees, contractors, and licensees worldwide. To date, more than 30,000 people have become "Cheetahs" using Cheetah Learning's innovative Project Management and accelerated learning techniques.

Michelle's articles have appeared in over 100 publications and web sites around the world. Her monthly column, the <u>Know How Network</u> is carried by over 400 publications, and her monthly newsletter goes out to more than 50,000 people. Her radio program, <u>Your World Your Way</u>, is a weekly broadcast that is an inspiring and practical look at how Project Management fuels success.

She is a graduate of the Harvard Business School's Owner President Manager's (OPM) program and also holds engineering degrees from Syracuse University and the University of Dayton.

She lives in Nevada with her family and likes to rejuvenate in Alaska where you'll often find her kayaking, hiking, and riding her motorcycle.

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