

Renewable Energy: Investing in the global transition to a cleaner energy economy

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The global community is witnessing the earliest stages of a worldwide transition of our energy economy. As a result, many retail investors are showing signs of enthusiasm for renewable energy markets. For the sake of supporting publicly-traded renewable energy companies that are legitimately contributing to our clean energy transition, this retail investor interest is a positive step.

For instance, in 2006, I alerted thousands of retail investors to a small geothermal company that was looking to build a geothermal power plant in the United States. Situated in the state of Idaho, this particular company was working diligently to raise the capital for power plant construction. Thanks to coverage I provided for the company to this group of retail investors, the company's stock price increased dramatically – and maintained a solid growth pattern until the recession kicked in. With that retail interest, other investors became aware of the company; within a short period of time, the capital for that power plant was raised. Today, that power plant is operational and sending 10 megawatts of clean power to the grid.

The point is that with strong support from retail investors, we can help enable the further integration of renewable energy into our energy mix. And this is why it's so important to educate investors about the necessity and profitability of renewable energy investing. We can do this by focusing primarily on two major issues that prove the long-term sustainability of the renewable energy market: peak oil and the economic burden associated with our continued reliance on fossil fuels.

1.) Peak Oil

Within the next decade, our increasingly limited access to cheap oil will present a serious economic crisis. In many respects, it already has. But thanks to continued subsidies and externalities, much of this crisis remains hidden from the public – particularly in the United States. The unsustainable nature of our oil-based economy cannot be hidden forever, though, as no amount of government support or lobbying efforts can alter the basic fundamentals of supply and demand...

Here are the facts:

1.) The world's largest oil reservoirs are mature; 2.) Approximately three-quarters of the world's current oil production is from fields that were discovered prior to 1970, which are past their peaks and beginning their declines; 3.) Much of the remaining quarter comes from fields that are 10 to 15 years old; 4.) New fields are diminishing in number and size every year, and this trend has held for more than a decade.

This is not reassuring when you consider that virtually everything we use and consume today relies on oil. It is the diesel in the trucks that ship our food, clothing, and medicine. It is the gas in our cars that get us to work, school, and the grocery store. It's used in fertilizers, cosmetics, and plastics. In our modern-day society, it's nearly impossible to consider anything that is not somehow related to oil.

Bottom line: This is a crisis situation. And for retail investors, crisis equals opportunity. The opportunity here is primarily for transportation alternatives, including electric cars, next-generation biofuels (utilizing feedstocks that do not compete with food or require heavy fossil fuel inputs), increased mass transit, high-speed rail systems, and more walkable communities.

2.) Economic burden associated with our continued reliance on fossil fuels

One of the biggest arguments used against the integration of renewable energy is that it's simply not an economically viable option and that it cannot compete without generous subsidies. But nothing could be further from the truth.

The fact is what we pay for fossil fuel-based power isn't really cheap at all. Actually, it is prohibitively expensive and can be directly related to many of the economic burdens we face today.

In 2000, the United States Department of Energy released a study which found that oil supply disruptions, price hikes, and loss of wealth suffered through oil market upheavals have cost the U.S. economy around \$7 trillion (in 1998 dollars) over the thirty years from 1970 to 2000. This is more than half the total U.S. national debt.

Very generous subsidies for fossil fuels also enable a system that allows mature and profitable industries to create the illusion that fossil fuels are cheap and renewable energy is expensive. In 2009, the Environmental Law Institute released a report that detailed subsidies for fossil fuels and renewable energy from 2002 to 2008. Fossil fuels received about \$72 billion, while renewables received about \$29 billion.

This kind of continued welfare for the very profitable oil and coal industries is largely unknown by retail investors. As a result, these investors are at a disadvantage as they don't have a full understanding of the macro environment that should play a role in their investment decisions.

Many retail investors are also unaware of the externalities associated with the production, distribution and consumption of fossil fuels. These externalities also contribute to the illusion of "cheap" fossil fuel-based power.

There is no question that fossil fuels carry with them serious environmental costs. And for decades, little attention – if any – has been given to natural capital. It has not been valued. In fact it continues to be liquidated, further enabling the deterioration of ecosystem services. These free, natural, and self-regulating services are worth trillions annually, but all too often this value is not reflected on balance sheets. So we continue to liquidate our natural capital without a care in the world. But this "business as usual" approach is simply unsustainable and will inhibit growth. And retail investors need to know this.

The end of artificially cheap fossil fuel-based power is coming. It will be here sooner than most realize, and no amount of lobbying or political maneuvering can change that. Diffusing this information to the retail investor community will not only help those investors make smart investment decisions, but it will also help further the growth of renewable energy – which really is the only solution in a post-peak world where natural capital will be properly valued.