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"A Portfolio of Dreams: Clean Energy as an Investment"

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“A Portfolio of Dreams: Clean Energy as an Investment”

Breathe in, breathe out. It's one of the simplest things we do as human beings, yet it is the most essential to our lives. We need clean air, and clean air comes from clean energy. Clean energy is vital to us all as it helps protect Mother Nature and keeps the fine balance of the Earth in check so that we may live on it for generations to come. This is a wonderful idea, in theory, and it is something that people widely accept as “good” and something that should be within our top priorities. However, clean energy is not thought about and we don't hear a lot about it during elections. “It's something to leave to the scientists; it's not an important issue to the voters” is something you may hear these politicians say from time to time. So if the issue becomes important to the voters it will become important to the politicians as well.

Now the question of “How?” comes into play. There are so many technologies and “green” ideas out there, which one do we back? Which source replaces oil and becomes our new favorite? The simple answer is none of them. There is a reason oil and coal have been, and are, our preferred method of energy storage and fuel. They're cheap, abundant, easy to transport, and the infrastructure is already in place so we don't have to invest heavily in its restructuring. No renewable energy source can compete with that. You can't ship wind, the sun, a river, or a geothermal reservoir from one place to another. The cost of sending the electrons a very long distance is also not feasible (with the system we have in place). And by going with biofuels, how do we address the problem of land use? With no flagship of renewable energy to stand behind, how could we ever replace the dirty fossil fuel structure that exists to one based off of the ability to, theoretically, power society indefinitely?

The answer is already right in front of us. We do them all. Sure, we only have a limited amount of resources to invest in them and it makes sense to say that investing heavily in one would get us farther than lightly investing in all of them. But the downside to renewable energy is the inconsistency. Sometimes there is no wind, sometimes there is shade, and sometimes you need more power than can be produced by a hydroelectric plant to satisfy peak loads. People aren't crazy about nuclear due to the accidents and potential damage the plants may cause and geothermal only works well in so many spots it's hard to get a consistent, base load to draw power from, especially if only one energy source is used.

This delicate balance of pros and cons can be greatly favored in the pros category through a portfolio. This business concept brings together different types of projects and items to strengthen the security of the entire thing. By combining forces, you can make up for one component's weakness by the strength of another and overall

improving the quality of the group. Why not, then, apply this same concept to our energy system? Renewables provide a wide arrangement of uses from electricity production to heating. However, multiple sources can be used to increase the productivity of one project and provide the versatility to power an entire site.

Whether a portfolio of clean energy is going to happen becomes less of a social concern and more of an economic concern. Before any project becomes developed, the simple question of “do we gain more than we put in?” must come back as a “yes” before the project will move forward. With oil and coal it seems the benefits are endless but we are missing out on the costs of damage to our environment and ourselves. When these costs are taken into the equation, the answer for fossil fuels becomes a “no” and the benefit of alternative energy projects becomes a huge “yes”. The costs versus benefits would show that investing in clean energy now, in a smart system, will offset the costs incurred and provide the benefits needed to move forward.

Sources:

Sawal, Janet I., et al. "Renewables 2012: Global Status Report." REN21. REN21, n.d. Web. 6 Dec. 2012. <<http://www.ren21.net/default.aspx?tabid=5434>>.

IEA. International Energy Agency, n.d. Web. 8 Nov. 2012. <<http://www.iea.org/>>.

Williams, Robert H., and Gregory Terzian. "A Benefit/Cost Analysis of Accelerated Development of Photovoltaic Technology." Princeton.edu. Princeton University, Oct. 1993. Web. 30 Nov. 2012. <<http://www.princeton.edu/pei/energy/publications/reports/Nr.281.pdf>>.