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Do we have what it takes to prosper in a fossil fuel free world?

Hell Yes!

The first topic I have decided to review and reflect upon can be found in the Sustainability of Resources header under Connect to Others on the home page of nationalstrategicnarrative.org. Though there are a broad range of topics addressed in this section of the site I chose to focus on the concepts put forth by Fuel Free.

Taken from the web site www.fuelfree.me, "Fuel Free is a project designed to help deliver the kind of information and resources needed to focus attention on building a 100% clean energy economy. The paradigm will be zero combustion, and the ability to power vehicles, appliances, computation, communications and the rest of our technological existence without carbon-based or nuclear fuels, hydrogen or other fuel sources. "

This is a pretty tall order but the question I chose to ask is this: Can we?

I understand some of the realities that exist in the world today and one of them is the absolute need for fossil fuels to power the economies of not only the United States but those of almost every foreign nation as well. We rely on these fuel sources and the global economy would effectively shut down if the project description of Fuel Free was implemented as policy tomorrow.

In the face of this reality the question is still there though: Can we?

If you have been in contact with any humans in the past few years I would hope that your answer to this question is a resounding "Hell yes!" There is more technology and computational power on my smart phone then what it took to send humans to the Moon. We can drill for oil from a moving platform through a mile of water and thousands of feet of bedrock. We can identify planets we can't see by observing the "wobble" of stars thousands of light years away. We humans kick ass. We humans are special creatures. We humans reflect on what we have done to better create in the future. We humans are also relatively short sighted, focusing on the here and now with little regard to how our current actions may affect the future.

So, can we? In my opinion, yes. Will we? In my opinion, I hope.

I can hear some of my friends now, "100% clean energy? No combustion! What about my friggin snowmobile guy!?! Or my ice auger! How am I supposed to go fishin!" Winter in Maine doesn't sound like too much fun without the aid of the internal combustion engine.

So what is the point of putting a link on your web site to a group of long haired stinky hippies that want to completely eliminate the use non-renewable energy? Well, as it turns out, the long haired hippy folk are people like me a former Marine, construction worker, and commercial fisherman. They are people like Mark "Puck" Mykleby, a retired Marine Colonel, fighter pilot, and coauthor of the National Strategic

Narrative. They are the open minded and forward thinking people of this planet that find it hard to deny the basic facts of science. They wear suits of fine material or Grundens to work, they pound rocks and crunch numbers, they serve your food and grow it too. They are also a growing number of our population and I don't think they are going anywhere.

Quickly I want to address one fact that has been the basis of my thought process when it comes to fuels and how we power our economy. You can argue all day long about "peak oil" and when it will happen. Whether you think "peak oil" was years ago or years in the future it is hard to deny the fact that there is a finite amount of fossil fuels on this planet and at some point, if we don't change direction, it will all be gone. That is reality.

It is with eyes, ears, and grey matter wide open that we must contemplate the current and future power sources we utilize on this planet. As laid out in the National Strategic Narrative, this type of open minded thinking will inevitably bring to the surface of your minds all of the threats that face us as a nation and global society. These threats can take many forms including but not limited to: Threats to our economy, energy infrastructure, ease of travel, standard of living, or just plain how we run our lives. However if you look hard enough, you can see all of the opportunities available to confront and overcome these threats.

It is like looking at a tall wall that you must climb over to escape from a slow moving Frankenstein. Do we look at the wall only and say "wow there is no way I can get over that wall so I'll just sit here and wait out my fate?" Or do we look around and notice all the other folks sitting down in front of the wall awaiting their similar destruction and raise our voices for a community discussion. Timidly in the back of the crowd you hear "There is some rope over here that we could use." To your left someone is contemplating building a human pyramid so that at least some can make it over the wall. To your right is another studying the nails holding the wall in place, she thinks that we can remove some of the boards and squeeze through. These are the opportunities that present themselves in the face of inevitable threat, you just have to get off your butt and look for them.

Now if we equate these fictitious "people" into groups of people or businesses I see growth in one sector over another. I see those embracing the opportunities of the situation over the status quo as the new drivers of the economy. The economy is stimulated by those researching and developing new technology, the economy is stimulated by fabricating these new technologies, and the economy is stimulated by the long term lowering of overhead and operations costs due to these new technologies.

You can see this at work in energy trends. We are a far cry from the early 1900's when you could shoot a bullet at the ground and oil would come spewing out. The trends of "energy in" to "energy out" shows us that it takes far more energy now to extract (energy in) some volume of oil (energy out) that we did in the old days. The opposite is true in regards to renewable energy. Though it is easy to make an argument that renewable energy is not currently as efficient as some fossil fuel energy sources, it is the trend that I look at. The trend for renewable is progressively more energy out for the same energy in.

It is a simple ratios construct. The ratios show the trend of fossil fuels extraction as unsustainable whereas the ratio trend for renewable energy sources as sustainable. Energy equilibrium is when you

have created as much energy using a “thing” as it took to make the “thing”. In a lot of cases associated with renewable energy farms there is an energy equilibrium point reached early on in the operational life of the farm. From that point on we are creating more energy then it took to fabricate and install the farm.

What I want to stress is the trends in energy production and all of the opportunities that can be found if you take the time to look.

I feel that I have answered **my** original question of “can we?” Heck yah we can, we are smart people. Now I have a question for **you**. Are you a sitter and waiter for the Frankenstein of status quo to gobble you up or are you an innovative problem solver with eyes wide open to the realities and science of the planet we all live in. Whatever you are, the former or the latter know yourself and seek self improvement. Research and ask questions so you can better understand the issues and challenges facing us as a nation and global community in the future. That is the best way to identify opportunities and prosper.