

January 13, 2017

ESSAY

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Title: Essay Regarding the Professor Roger Pielke Jr. Letter

This is written in regard to Professor Roger Pielke's article on page A9 of the December 3-4 issue of the Wall Street Journal (WSJ). I commend the WSJ for publishing Prof. Pielke's letter.

To set the background for this letter, I am the author of the book "*Steal the Wind Reap the Whirlwind*", published on November 24, 2015. I wrote this book as a "*layman*" author, which I make clear throughout my book. I do have a degree in Geology from the University of Minnesota, which benefitted me greatly in my research and writing, but my lifetime career path was working in the computer software field for more than 50 years, beginning in 1959. That accounts for me being about 83 years old.

I am not a "climate scientist" and do not claim to be but that did not preclude me from being somewhat skeptical of much of what is taking place in the broad field of renewable energy, global warming, climate change, and the entire field of 'energy' for the human population of this planet. After reading Prof. Pielke's article it was easy to conclude that most, if not all, of his persecutors (including science advisor John Holdren) have done very little to educate themselves about what progress, or lack thereof, that has been made against the *global* level of carbon dioxide (CO2) emissions with the focus on "renewable" energy. It appears to me that the most common trait among all of these players is "arrogance". I would classify all of them as "*lemmings*", leaping on the Climate Change bandwagon to see how they can benefit from the discourse.

What happened to Prof. Pielke is an example of the power of a few people and groups when they are funded by backers with large amounts of money and supported by powerful political forces. Arizona Rep. Raul Grijalva's letter to the University of Colorado president was clearly an exercise of personal political power or even a form of "climate McCarthyism". As a long-time resident of Colorado I commend the University of Colorado for resisting Mr. Grijalva's judgmental and arrogant efforts to have the professor removed from the faculty.

In my book I coined a new word to describe the persecutors of Prof. Pielke as well all the environmentalists who take liberties with environmental science. I call them "socioenviroemotionalists" (socio-enviro-emotionalists). These are persons who are driven not by reason or rational study or rational science, but by the great social upheaval of the last half century coupled with pure emotionalism. This segmented term can be applied to many other areas as well,

such as politicians, economists, lawyers, professors, teachers, judges, and even scientists. Just substitute the middle part of the term.

Something we must all acknowledge is that for many years the term “Climate Change” did not even exist in the energy jargon. The term used early on was “Global Warming”. The name change came about because internationally renowned scientists and professors were caught lying about numerous prognostications about Global Warming. The easy thing for them to do was to *change the name to protect the guilty*. I don’t know if Rep. Grijalva was around at that time but if he was I certainly hope he was at the forefront of investigating those scientists and professors responsible for the misrepresentations as aggressively as he pursued Prof. Pielke!

Climate Change fanatics have now conjured up a new criminal act called “Climate Change Denial”! A couple of state Attorney’s General have even considered prosecuting companies and individuals. Are these rational people or socio-political-emotionalists?

I must admit that I had never heard of Prof. Pielke before reading the article in the WSJ. I subsequently did a search which turned up a large list of his papers as well as many of the papers objecting to his work. I intentionally will not read any of them because they are not relevant to my positions on the energy issues. I certainly believe that Prof. Pielke had the right to present his views without being viciously attacked and defamed, particularly by persons whose believe “climate change denial” is a crime.

There has been much effort over the past almost eight years to portray “Climate Change” as “settled science”. On the contrary, there are many noted scientists (NASA scientists, NOAA scientists, and many others), most or all of which are far more qualified than any mentioned in the article, who take issue with the “settled science” narrative. Also, it should be pointed out that many others who disagree remain in the “shadows” because they depend on the federal government for grant money and other forms of financial support for their research and related efforts and dare not risk being exposed. I will say that the number thrown around that 90% plus of scientists agree that Climate Change is settled science is grossly overstated.

As for me, the argument is irrelevant. My position is that this country and the world are obsessed with the atmospheric carbon dioxide (CO₂) level, global warming, climate change, melting ice, calving glaciers, rising oceans, etc. and we need to conquer the CO₂ *pollution* problem and move on to pursuing scientific progress that is essential to the survival of humankind, both on this planet and beyond.

The ideologues mentioned in Prof. Pielke’s article may not be happy with my assessment of renewable energy and my portrayal of what we really should be doing to solve the CO₂ emissions problem in order to move on to creating a better future for this planet. Being an 83 year old “layman” however, I am not particularly worried about persecution.

I clearly acknowledge that increasing levels of CO₂ in the atmosphere do have a warming effect on the planet earth. That is a chemical and atmospheric fact. Savante August Arhenius, a Swedish scientist born in 1859, formulated his greenhouse law in 1896, “*If the quantity of carbonic acid (CO₂) increases in geometric progression, the augmentation of the temperature will increase nearly in arithmetic progression*”.

As a “layman” who has strong views and an innate knowledge of nature and having conducted extensive research in the field of climate change and renewable energy over the past many months I herewith announce my “Hyland” greenhouse law of 2017, “*If the focus on ethanol, wind power, and solar power increases in geometric progression, the augmentation of the delay in reducing carbon dioxide (CO₂) emissions will increase nearly in arithmetic progression*”.

We must recognize that virtually all of the existing and proposed Wind Power and Solar Power is superfluous power. That is, it serves no purpose unless coal plants, nuclear plants, or other power plants are shut down. Therefore all money spent on them is “unnecessary spending”. Hyland’s greenhouse law clearly implies that if the hundreds of billions and even trillions of dollars spent and planned on Ethanol, Wind, and Solar were spent on new power research such as Nuclear Fusion and other futuristic forms of energy as well as on bridging technologies such as carbon capture, carbon storage, *carbon removal*, and other power research we would solve the CO₂ emissions (and other emissions) problem far more rapidly and would have 22nd Century technologies in place rather than primitive 19th Century technologies. Also, we would continue to have what I refer to as “active” power sources rather than “passive” power sources. I trust that only “socioenviroemotionalists” will have trouble determining what I mean by “active” and “passive” power sources.

If Climate Change and all of its implied catastrophic outcomes are “settled science”, and our primitive approaches to solving the problem are the primary accepted solutions, then I shudder at the state of our scientific community and the future of our planet.

While I do not agree that we are facing a calamitous climate event by the latter part of this century, as proclaimed by the fanatical Climate Changers (surely including all of those mentioned in Prof. Pielke’s article), I do believe that we need to accept that that may be the case because only then can we change what we are presently doing and attack the problem with rational scientific approaches!

Fortuitously, On Tuesday January 10, 2017 Americas first “clean coal” plant was declared operational, a joint effort by the large energy firm NRG Energy and JX Nippon Oil & Gas Exploration Corp. This is reinforcement of this simple *layman’s* position on how to apply rational science rather than *socio...emotionalism* to attack what is considered by politicians and wayward scientists to be the greatest problem to ever face humankind. This is a momentous occasion in the fight against Global Warming and Climate Change. A second plant, using a completely different technology, is expected to be operational by January 31st. This is the

Kemper Plant in Mississippi. The Kemper plant applies a different technology which turns lignite coal into a gas, “*Syngas*”, which is then burned for electricity.

Both of these technologies could be applied worldwide to dramatically reduce CO2 emissions where coal is plentiful and is the primary source of energy.

New revelations of progress in developing technologies to reduce greenhouse gas emissions are appearing with greater and greater frequencies. Unfortunately, they are being ignored by the powerful “Climate Changers” and their supporters.

We constantly hear the call for “renewable energy” and that we must get the world off “fossil fuels”. This is where the Climate Change fanatics collide with the few who dare to proclaim rational science. Bill Gates has formed a \$1 billion consortium of tech leaders to develop new clean energy technologies but naively continues to support a major role for renewable energy. Mr. Gates dares not take the giant leap to rational science and state categorically that so called renewables are not the answer for “mass replacement” of existing fossil-fuel power sources. Unfortunately, the \$1 billion committed to his Tech Consortium will do nothing to achieve solutions. This is a pin-prick on a pin-prick. Hopefully, however, he and his cohorts will develop the courage to call for a redirection of all financial and scientific resources to do what is necessary to quickly reduce CO2 emissions, reduce CO2 presently in the atmosphere, and move to develop futuristic technologies for power generation on this planet. We can do this!

The **Paris (*Climate*) Agreement** was negotiated in Paris in November/December 2015 by representatives of 195 countries and adopted on December 12, 2015. As of December 2016 194 members had signed the treaty with 118 ratifying it. The agreement went into effect on November 4, 2016.

My feeling about this agreement is that 175 or even more of the countries signed only because they believe they will receive funding of some sort from some of the other twenty or so “developed” nations and they relish the opportunity to occasionally “party in Paris”.

Although it is not a part of the Paris Agreement and is not legally binding, there is a plan for the U.S. to provide \$100 billion a year in aid to the developing countries for implementing procedures to minimize climate change. If provided, the U.S. (and every other developed country that contributes) will need to “print” or “borrow” every dollar of the money they contribute to this sham agreement. Not a single one of them has surplus money!

Here in the United States we have focused on three Renewable Energy initiatives in our quest to rid the world of excess carbon dioxide (CO2) emissions. These are Ethanol (biomass), Wind Power, and Solar Power. Some of the elite Climate Changers may forget about Ethanol but this is considered a “clean” fuel. I will make the rash statement that if you consider the totality of each of these there is nothing “renewable” about any of them.

I am reasonably confident that Prof. Pielke's persecutors; John Podesta, Tom Steyer, Robert Muir Wood, Justin Gillis, Mike Wilson, Brad Johnson, Michael Mann, Raul Grijalva, and possibly even John Holdren, have little concept of geologic time and the thousands of times that this earth has gone through major deviations in temperature. This applies as well to writers and staff members in the various groups mentioned in Prof. Pielke's article. Most are blindly following a path that is popular but which they really know very little about. It is puzzling that they have no motivation to learn what massive numbers of wind turbines and solar panels will really accomplish in terms of lowering "global" carbon emissions when more coal plants will be built over the coming years than what can possibly be compensated for by the turbines and panels.

I wonder how many of these individuals read the article "*General Electric Gets Bullish on Coal - - Again*", published in the Thursday, August 11, 2016 issue of the Wall Street Journal. That article states that global electric production fueled by coal will be 23% higher in the year 2040 than in 2012. This is a projection by the U.S. Energy Information Administration, as stated in the article. Equally as interesting in the article is the projection by GE leaders regarding decades of lucrative business maintaining and upgrading existing coal power plants following its acquisition of Alstrom SA's power business in 2015.

Let me try to present a case for each of the three renewable initiatives that might show the hopelessness of them solving the problem we are facing.

First, Ethanol (sometimes referred to as biomass or biofuel):

The "*Energy Independence and Security Act of 2007*" authorized the great leap into ethanol production, primarily from corn. Its main objective was to "increase the production of clean, renewable fuels". A goal, set later, was to produce 36 billion gallons of biofuels annually by 2022. This has been the most environmentally destructive program in the history of the world. Our own politicians and bureaucrats in the Department of Energy put together this insane Bill. My book goes into this in detail so I won't repeat them here. I will, however, present one example of the ridiculousness of this out-of-control program.

On December 29, 2014 I noticed an article on the Yahoo finance website. The title caught my attention as I was working on my book. It read "*Program that backed 'Solyndra' now showing success*". The Department of Energy chose to support the construction of a cellulose Ethanol refinery in far southwest Kansas near the town of Hugoton. This was the third cellulose Ethanol refinery co-funded by the DOE. This was to be a \$500 million facility and the DOE would provide \$97 million in the form of a cost-shared funding grant and a \$132 million loan guarantee.

It was said this facility would generate jobs, improve energy security, and reduce greenhouse gases. A Dollar General store would be built in Hugoton as well as a new motel, and new people would be coming to town. Abengoa SA, one of Spain's largest industrial companies, would build the refinery through its Abengoa U.S. entity.

On October 17, 2014 Department of Energy Secretary Ernest Moniz joined other dignitaries to celebrate the grand opening of the “Abengoa Bioenergy Biomass of Kansas (ABBK)” facility. The facility was designed to produce 25 million gallons of ethanol per year. It was to use crop residue, primarily corn stalks and cobs, residue agronomists say should be returned to the ground.

In one of the later chapters of my book (pages 146 -149), I wrote that this Abengoa cellulose refinery “*would be bankrupt in ten years and residents of Hugoton will wish they had never heard of Abengoa*”. I further stated that the new motel would be closed and that the new houses would be deserted and returned to “dust” as in the Dust bowl era of the 1930s.

I was only off by 9 years! Abengoa U.S. entered bankruptcy in February, 2016. The Abengoa Bioenergy Plant of Kansas (ABBK) filed for bankruptcy on April 6, 2016! The bankruptcy court bidding for the Kansas plant opened on October 12, 2016 when Shell submitted an initial bid of \$26 million. Synata Bio won the bidding on December 2, 2016 with a bid of \$48.5 million for this \$500 million facility! Those individuals involved in this (and other) ventures by the Department of Energy are certainly at the pinnacle of “socio-enviro-emotionalism”, just as those are who persecuted Prof. Pielke.

There are many “experts” who attest that the ethanol production cycle produces more carbon dioxide emissions than it saves.

Second, Wind Power:

Here in the United States Texas leads in MW’s of wind power generated. Iowa now ranks second after recently moving ahead of California.

California is an enigma in the area of Wind Power. At one point in the 1990s California had more than 16,000 wind turbines. In the map shown in the *Fortune* magazine December 15th issue, in the article on Warren Buffet’s Berkshire Iowa Wind Power, California has 5,662 MW of wind-power capacity. On the AWEA (American Wind Energy Association) website the State Wind Energy Facts for California shows 5,662 MW of wind capacity and 8,413 wind turbines. This means that California has about 8,000 fewer operational wind turbines than it once had. There are many questions regarding whether all or some of these 8,000 wind turbines are still standing, decommissioned, or abandoned. In any case, the current ratio of wind turbines to power capacity 5,662/8,413 gives an average capacity of 0.67MW per turbine. This means that almost all of California’s wind turbines are obsolete. It is safe to say that the lowest capacity of commercial wind turbines being installed today are the 2MW turbines planned for installation in the new Berkshire 2,000 MW wind complex in Iowa. Interestingly, California’s wind power capacity has barely increased since 2011. As I state in my book, California is “outsourcing” its wind power generation, leaving it to other states like Wyoming to slaughter their birds, bats, eagles and raptors. I believe it is a reasonable assumption that California does not want to build more wind farms within their borders. Readers should read about the California *socioenviroemotionalists* outrage

over California purchasing power from PacifiCorp, Buffet's Berkshire West Coast utility that is powered mostly by coal and natural gas.

AWEA states that the more than 49,000 wind turbines in the U.S. have 75,716 MW's capacity. This means the average capacity per wind turbine is $75,716/49,000$ which is 0.155 MW per turbine. This means that a substantial number of these turbines are approaching obsolescence.

The European Union is far ahead of the U.S. in the amount of Wind Power and turbines. Within the EU, Germany alone has more than 26,000 wind turbines and is one of the leaders in the amount of power generated by Wind. Germany is spending or has spent more than a trillion dollars on its "*Energiewende*" Program. *Energiewende* is Germany's program to move off all fossil fuels as well as Nuclear. Germany has a massive wind power footprint, most of it in the north region and in the North Sea. Most of its industry is in the south so they must build high voltage transmission lines from the north to the south. The population is weary of the massive number of Wind Turbines on their landscapes and now they have to contend with more transmission lines. Many of these transmission lines must be placed underground, a very expensive alternative, because of opposition by the populace.

As part of this massive program, Germany has shut down 8 of its 17 "*Carbon-free*" nuclear plants and plans to shut down the rest by 2022. It has also shut down several "new" natural gas plants in its fanatic drive to move to Wind and Solar. In November 2015, however, it opened a large new 1,500 MW lignite coal power plant to appease coal miners, probably the only logical thing they did. As a result of all of these actions, Germany's CO2 emissions have not been reduced at all (or very little) since 2010, primarily because of shutting down clean, emissions free, nuclear plants.

More than 7,000 of Germany's 26,000+ wind turbines are now obsolete and must be "decommissioned", and this trend will continue in the coming years. These are costly to decommission and recycle and would be extremely costly to replace, if Germany chooses to replace them.

While all this is going on, Germany is one of the leaders in "nuclear fusion" research. France is one of the other leaders in nuclear fusion research. Germany is focusing on the "Stellarator" concept while France is focusing on the "Tokamak" concept. The funding commitment to these projects is microscopic, however, compared to the spending on "Windmills" and "Glass Panels".

We are living in the year 2017. How long will it take to populate the world with millions of wind turbines and billions of solar panels? Will the sun begin shining at night? Will the wind always blow in the same patterns with millions of turbine "*harvesting*" the wind? Will Elon Musk produce 2,000,000,000 reliable batteries? How will monstrous mechanical wind turbines advance 21st and 22nd Century power technology? Each wind turbine contains about 8,000 parts. None of these parts are "renewable". Each turbine requires a massive foundation of concrete and steel. Cement is the dirtiest industrial process on the planet in terms of CO2 emissions. Steel production ranks second.

The likes of Bill Gates, Elon Musk, Jeff Bezos, Eric Schmidt, Mark Zuckerberg, Tim Cook, Ginni Rometty, Sheryl Sandberg, Larry Page, Sergey Brin, Satya Nadella, and surely other great minds need to break away from the pressures of overwhelming social drivers and emotionalism and recognize that we can develop the bridging energy technologies that can dramatically reduce CO2 emissions and provide the lead time to develop new, far-reaching energy technologies of the future. The future does not lie with pinwheels, glass sheets, and corn!

Nuclear fusion would produce unlimited “clean” power and also very likely help advance our exploration of space. Nuclear fusion does not produce radioactive waste. There are other technological advances that can be developed far more rapidly than primitive renewable energy can be expanded to power the world. Nuclear fusion research is making great progress but is funded and supported almost at a hobby level compared to the focus on Wind Power and Solar Power. Even so, German researchers are confident they will have functioning reactors by the 2040s, long before Wind and Solar will make an impact on eliminating fossil fuel electric power.

On December 6, 1941, President Roosevelt authorized the “Manhattan Project”. Less than three and one-half years later America had developed “atomic power”. No one can tell this simple “layman” that America cannot produce “nuclear fusion” power or accomplish other major scientific power breakthroughs. We can do this and completely solve the CO2 emissions problem and the global warming problem if we just get our heads out of the “Social Sand”! In *“Steal the Wind Reap the Whirlwind”* I call for the “JFK Atmosphere Recovery Project”, the **“Kennedy Project”**, named after our last truly “visionary” President.

How many of the individuals in the Prof. Pielke article know that on this 4,450,000,166 year old planet (I have added the 166 years to refer to the period of time since the start of the Industrial Revolution) that our five Great Lakes; Lake Superior, Lake Michigan, Lake Huron, Lake Ontario, and Lake Erie, were formed a mere 12,000 or so years ago when the last glaciers, a mile or two deep, receded from Minnesota, Wisconsin, and other areas of North America and the Northern Hemisphere? This Glacial Period began about 120,000 years ago and just ended about 10,000 years ago. Sea level was about 400 feet lower than it is today. The great thaw began about 20,000 years ago as global temperatures rose 3.5 degrees Celsius (horrors!). *Do you believe that our ancestors, who could then walk across the English Channel, were desperately trying to “STOP THE WARMING”, as we are today? Were those humans here in North America and Siberia who were hunting the Woolly Mammoths and Mastodons for food, clothing, and footwear as frightened as those individuals listed earlier are today?*

Let’s turn to the United States and look at the state of Iowa, number two in the MW’s of power generated by Wind. The December 15, 2016 issue of *Fortune* magazine, mentioned earlier, had a lengthy article on MidAmerican Energy, Iowa’s Wind Power colossal. MidAmerican Energy is a Warren Buffet/Berkshire Hathaway company.

In Iowa almost every acre of grassland and pasture has been plowed up to make way for corn to meet the 36 million mandate for ethanol to be produced annually by 2022. Now Buffet's Berkshire MidAmerican Energy has created a vast jungle of spinning turbines in amongst the corn and soybean plants. Next will come a High Voltage Transmission Line from northwest Iowa to the Illinois border and eastward to provide for the export of Wind Power to Chicago and the eastern United States. This transmission line, known as the Rock Island Clean Line, is not a given, however, as many citizens in both Iowa and Illinois are fighting this additional intrusion on their landscape.

The Iowa wind industry wants to build the 500 mile "*Rock Island Clean Line*", from northwest Iowa to Illinois border and on eastward into Illinois. It was first proposed in 2010 and has fought for six years to get regulatory approval in Iowa and Illinois. The purpose is to continue the growth of the monstrous turbines in Iowa and export wind power all the way to the east coast. Bitter battles have been fought in both Iowa and Illinois.

The *Rock Island Clean Line* just announced in December that it has withdrawn its pending applications for franchise approval at the Iowa Utilities Board (IUB) until a resolution of pending legal proceedings in Illinois are finalized. This is a major battle representing strong opposition to wind power.

Another major battle is being fought in South Dakota in Lincoln County. Lincoln County brushes up against the southern outskirts of Sioux Falls and borders northwest Iowa on the east. This battle is being fought between the South Dakota Wind Industry and residents of the county who are opposed to having hundreds of massive turbines in their midst. The Lincoln County Planning Commission is at the center of this "*Battle for South Dakota*".

A sentence on Page 161 of the *Fortune* magazine article reads as follows: "*But Berkshire Hathaway is fully committed to remaking the landscape – figuratively in energy, and literally in Iowa*". There is no question about that, but battle lines have been drawn.

Again, in the "*Fortune*" magazine article on pages 158, 159, you can see a worker atop a giant wind turbine and see picturesque farmsteads in the background. In the coming years and even now people refuse to live on these farmsteads, surrounded by the spinning monsters. The land now occupied by the farmsteads will become more valuable for cropland and more turbines. The farmsteads will be bulldozed and cleared to eliminate the "setback" requirement for wind turbines. More trees will be destroyed, but the socioenviroemotionalists will cheer the rise of ever more turbines.

Another interesting excerpt from the *Fortune* magazine article, on Page 160, should be of interest to Iowa residents: "*This year Berkshire is on track to spend almost \$1 billion on its Iowa wind facilities alone – though Buffet admits he himself has never done more than drive past a wind farm. In an interview in November, 2016 Buffet told Fortune, 'On the subject of hamburgers, I am an expert, Wind, I know less'*".

Come next spring, as new crops are growing and the trees are fully leafed, I propose that Warren Buffet take a three-day tour of Iowa's "Turbine Jungle" to see what MidAmerican Energy has created across the Iowa landscape. He should ask himself if he would like to live on a farmstead surrounded by these new spinning "trees" or perhaps even spend a night in one of the farmhouses. On this brief trip I recommend that he also take a detour into southern Minnesota to tour the Grand Meadow area, another turbine jungle. To reach this area he can have his driver take I-35 north to I-90, just across the border in Minnesota, then drive east on I-90 to near Mile-marker I-90. I grew up about 15 miles from the small town of Grand Meadow, a beautiful fertile farming area that began sprouting wind turbines about 2007. The Doctor, Dr. Mitchell, who delivered myself and five of my siblings, had to drive from Grand Meadow to the farmhouse in which we were born. While visiting in 2007 I witnessed the turbines rising from the fertile farms and it was then that I decided on the name for my book (*Steal the Wind Reap the Whirlwind*), although I would not begin writing until a few months before my 81st birthday in 2014.

These Wind Farms, all across the Midwest and Great Plains, I have designated "*Wind Forests*". As multiple Wind Forests have grown I have designated the groups as "*Wind Forest Chains*". In my book I have identified the "*Wyoming – Texas Wind Forest Chain*" and the "*North Dakota – Indiana Wind Forest Chain*". Together these two forest chains now contain around 40,000 wind turbines. These are giant killers of millions of birds, bats, eagles, raptors and even bees and butterflies. Readers should go online and search for the detailed study done by the Ornithological Society of Spain, a country inundated with wind turbines, as is much of the European Union. The Obama Administration just a few days ago (December 2016) gave "Special Dispensation" to a huge Wind Farm being built in Wyoming to allow the killing of Bald Eagles in return for "mitigation" efforts elsewhere. Socioenviroemotionalist groups applaud these coordinated bird killing, mitigation programs. This Wyoming Wind Farm will export its power to California, via a 750 mile high voltage transmission line.

As a young boy in Minnesota during World War II my younger brother and I would collect milkweed pods and sell them to the local junk dealer. They were used in the manufacture of parachutes. Back then we would see huge numbers of Monarch butterflies throughout the summer. Today the Monarch Butterfly population has declined about 90 % from a recorded peak in mid 1990s. Warren Buffet is just a few years older than I am. I wonder if he remembers the thousands of Monarchs that were always present as a child. One reason commonly put forth for the disappearing Monarch is the decline of the milkweed, a plant on which the Monarch lays its eggs. This is a result of the need/greed for land to grow corn for the millions of gallons of ethanol and other crops, reducing the open land available for the wild milkweeds. I have an additional theory for this decline over the last fifteen to twenty years.

The Eastern Monarch (east of the Rocky Mountains), the largest Monarch population, migrates north in the spring through a corridor of south Texas from a small area in Mexico to spend the spring, summer, and early fall in areas of the U.S. and Canada. The Monarch goes through four generations over this period with only the fourth generation Monarch surviving and migrating

south in the fall to the same area of Mexico that its “grandparent” migrated from. This is the only generation to make a round trip (south and back north). The life stages of the Monarch is complex and very interesting, and is too complex to describe in detail here. The Monarch migrates north from Mexico to the Great Plains, Midwest, Canada, and the eastern United States. Its 2,000 to 3,000 mile Flyway through the small corridor in south Texas is now littered with a vast forest of 35-40,000 giant wind turbines in Texas, Oklahoma, New Mexico, Kansas, Colorado, Wyoming, Iowa, Minnesota, South Dakota, North Dakota, Southern Wisconsin, Illinois, and Indiana, and even areas in Canada and the number of turbines is growing. The “Western” Monarch (west of the Rocky Mountains) also fights wind turbines, those located in the mountain passes in California, on its way to winter in the coastal eucalyptus trees. The socioenvironmentalist groups cheer the rising turbines while biologists and “concerned” environmentalists fight to save and restore the Monarchs.

The Monarch relies on delicate electromagnetic sensors as an internal compass and the sun for navigation. It is able to sense the changing weather in the fall and know that it is time to begin the 2-3,000 mile journey south back to Mexico. Even though a Monarch will make this journey south only once, it knows what path to take and sometime returns to the very same tree as that of its ancestors. I contend that the electromagnetic forces, turbulence, vortexes, and other influences of the giant wind turbines interfere with the delicate sensors of the Monarch, making it difficult to navigate on their long trip south. Many more may also be killed by blades of the spinning monsters. The presence of the turbines in their summer range may also create disturbances that affect the four stages the new butterflies go through during each of their four generations. The demise of the Monarch tracks very nicely with the rise of ethanol refineries and wind turbines, beginning in the late nineties to the present.

Think about the “renewable” deaths of future hundreds of millions and even billions of birds, bats, eagles, raptors, bees and butterflies as millions of wind turbines and billions of solar panels are spread across the planet.

Major unpublicized battles are going on across this nation, Canada, and throughout the European Union by millions of homeowners, farmers, ranchers, small towns and villages against the Wind Power industry. These people are bitterly opposed to the massive turbines rising amongst them.

Third, Solar Power:

I will not go into detail on Solar, except to say that roof-top solar and large utility scale solar-arrays or solar-gardens are no more answers to the Climate Change dilemma than ethanol or Wind Power.

I will mention, however, that Buffet’s Berkshire is also heavily invested in Solar Power through NV Energy in Nevada. Solar Gardens are also bird killers. Sympathetic biologists call the birds “streamers” as they catch fire and glide to earth trailing smoke like World War II fighter planes, plummeting to earth as they fly over a Solar Garden..

Back to reality.

We do have a problem. We are polluting our atmosphere. We should do something about it.

I want to list a few statistics.

- A. The population of our planet earth, when I graduated from High School in 1951, was 2,500,000,000. Today, a mere 66 years later, it has tripled to 7,500,000,000. The U.S. population increased from 150,000,000 to 325,000,000 over this same period, more than double (in spite of more than 60,000,000 abortions during the period).
- B. The national debt of the U.S. is \$20 trillion and growing. That's a big number! It is a frightening number, one that will become more frightening as it rises along with interest rates!
- C. The Federal Reserve Account increased from \$900 billion in 2009 to more than \$4 trillion dollars today. All of this increase is "printed" money.
- D. The "unfunded liabilities" of this nation are, very conservatively, about \$100 trillion. They may be half again this much.
- E. The populations of China and India are, respectively, 1.4 billion and 1.3 billion. These nations, and others in the Far East recognize that they need more and more "reliable, active" electrical power. They recognize that the quickest way to get this power is coal power plants.

I provide these few statistics only to show that our most serious problem is not Climate Change!

World economies must continue to function. China will continue to function. China will not put up massive numbers of windmills and solar panels and allow its economy to collapse, nor will India, Bangladesh, Pakistan, Indonesia, Malaysia, etc.

China is going to increase its coal-fired capacity by 200 gigawatts between now and 2020. That's 200,000 MW, equivalent to 100,000 2MW wind turbines. By comparison, 200,000 gigawatts is more than the total power capacity of Canada.

For China, this will require the construction of an average of two new 600 MW coal plants each week over the remaining 150 weeks between now and 2020. That would be 300 new 600MW coal power plants. This information, by the way, is reinforced by the article titled "*Beijing to Beef Up Its Coal Capacity*" in the November 9, 2016 issue of the Wall Street Journal. Another article titled "*China to Put a Little Less Energy Into Clean Power*" appeared in the WSJ on Monday, December 5, 2016.

What does this say about China's commitment to the Paris Climate Accord?

Google stated very recently that all of their facilities are running 100% on clean energy. This means that "someplace" they have constructed Wind farms or Solar Gardens linked to a Grid that is linked to their facilities. They do not divulge that those Grids would not exist were it not for coal and natural gas or nuclear power plants. Apple says that about 97% of their stores are now operating on clean energy. Schmidt, Cook, Bezos, Musk, and other tech leaders think they are "saving the planet" with their nonsense when in fact they are doing absolutely nothing to reduce the level of CO₂ in the *global* atmosphere and will do nothing before we could have totally new forms of energy available to accomplish just that (if we wake up). Some people consider these people "geniuses". Be assured, they are without doubt intelligent people but they are nowhere near geniuses. They have worked hard and have been very lucky. They are hoping to buy a little prestige by jumping on a political bandwagon to avoid being called "climate deniers". As an aside, of all the great Tech leaders of recent decades, the only genius was Steve Jobs.

Bill Gates is at least rational enough to acknowledge that Wind and Solar are not the solutions to the problem facing us. He does not, however, have the courage to take a strong stand stating that we should stop spending massive amounts of money and resources on renewable energy and instead focus on futuristic solutions.

The WSJ has published numerous articles over the past days, weeks, and months that taken individually and together clearly show that all these glass panels, huge pinwheels, and corn ethanol will do nothing to reduce the threat of Global Warming or Climate Change.

Let me address just a couple (others were discussed earlier):

The article titled "*What's the Best Way to Finance New Energy Tech?*" appeared in the Wall Street Journal on Monday, November 14, 2016. Three highly respected gentlemen responded to questions posed by a WSJ reporter. I want to expand on a comment made by Mr. Jim Rogers, former chairman and chief executive of Duke Energy Corp. The comment stated that nature could provide 30% to 40% of the solution to carbon emissions in our environment through things such as reforestation. Not a chance, Mr. Rogers. A study conducted within the past year or so, published in the journal "Nature" showed that the earth had 5.6 to 5.7 trillion trees at the dawn of human civilization. Today there are only about 3 trillion trees remaining. The world harvests 15 billion trees each year and replants 5 billion for a net decrease of 10 billion. Replanting more than this number is nearly impossible for many reasons, including available land. The projection is that within 300 years there will be no more trees on the planet. Refer back to my population numbers. Socio-econo-emotionalists push for more immigration and at the same time view the annual construction of new homes (and commercial construction) as one of the main drivers of the economy. Increasing populations will require more and more trees to be harvested.

One of the more timely articles published in the Wall Street Journal was titled: "*The Dividends of Funding Basic Science*". This was published on Tuesday, December 6, 2016. Basic Science

research is desperately needed in this country and the world. The final conclusion in *“Steal the Wind Reap the Whirlwind”* is that the United States needs a new “Manhattan Project” to develop the technologies to eliminate CO2 emissions and defeat the “Climate Change” obsession. As mentioned earlier, I have named this project the “JFK Atmosphere Recovery Project”, or *“The Kennedy Project”* for short. This project envisions a massive, highly focused, basic research effort.

Another conclusion is that, except for highly localized projects, this nation and the world should cease all spending on Wind Power, Solar Power, and Ethanol. These are primitive forms of energy driven primarily by greed. All future energy spending should focus on accomplishing the goals laid out in *“The Kennedy Project”*. That is the only way humankind can eliminate the threats of Global Warming and Climate Change!

Some final points needs to be made by this simple “*layman*”.

The atmospheric Carbon Dioxide (CO2) level currently sits at about 399 ppm, up from about 280 ppm in 1800. All the “settled science” experts categorically believe this 399 ppm level is causing Climate Change. If we stopped all anthropogenic (human caused) CO2 emissions today these same experts would say that we have conquered Climate Change. That is the ultimate naiveté. The atmospheric CO2 would remain at 399 ppm or perhaps even rise somewhat. So, according to current belief of these experts, Climate Change would continue to be a threat. The CO2 level would not suddenly drop. Atmospheric CO2 may take hundreds or even thousands of years to naturally dissipate.

To lower the level of CO2 in the atmosphere we need to develop “Carbon Removal” technologies capable of removing large volumes of CO2 from the atmosphere.

To summarize for the socioenviroemotionalists:

- We must develop “Carbon Removal” technologies. This is absolutely essential and this can and is being done. This must be one of our highest priorities.
- We must develop new uses for CO2. This can be done.
- We must develop Carbon Capture technologies. This can and is being done. This is essential for the existing coal-powered plants and the hundreds of coal powered plants that are and will continue to be built. On Tuesday, January 10, 2017, the first large scale U.S. “clean coal” facility located outside Houston, Texas was declared operational by the joint team of NRG Energy and JX Nippon Oil & Gas Exploration Corp. This represents installing carbon capture capability at an existing coal power plant, something that has application throughout this country and the world. Japan has made great progress in the development of carbon capture and carbon storage technologies since the Fukushima nuclear disaster in 2011. Japan is taking rational approaches to its power future and very likely will be a leader in the development of 22nd Century power technologies.

- We must identify the most egregious coal-powered plants and shut them down or replace them with natural gas or LNG powered plants.
- We must develop new, futuristic, forms of electric energy generation. This can be done with focused financial and scientific resources.
- We should recognize that Solar and Wind may be used as highly concentrated sources of power on a localized basis to provide the large amounts of electricity needed to “split hydrogen, or split water, or create the heat or pressure necessary to initiate nuclear fusion, or other futuristic energy processes. I am venturing into areas far beyond my expertise.
- Most importantly of all, we must recognize that crop-based ethanol is a disaster; that Wind Power is only a solution for small isolated pockets of human populations; that Solar Power also is only a solution for small isolated pockets of human populations; and we must cease all subsidization and development of large scale Wind and Solar power development.

The future is now, asking us to move beyond primitive thought. We must commit the vast majority of our scientific and financial resources to developing new, futuristic forms of energy.

The persecution of Professor Pielke defines the formidable, vindictive forces facing scientists and leaders, those who believe there are rational scientific solutions to eliminating greenhouse gas emissions and progressively restoring the atmospheric levels of carbon dioxide to levels that existed decades ago.

The Consortium created by Mr. Gates and other renowned Tech leaders can be at the forefront of a new force for energy development, but only if they have the courage and vision to take on the forces of “Socio..Enviro..Emotionalism”.

I also believe that the combined resources of the fossil-fuel industry and entities like NRG Energy, JX Nippon Oil & Gas Exploration Corp, Southern Company, and other related entities that have given the world a century and a half of electrical energy and progress, can be the leaders in developing “bridging technologies” AND new forms of energy such as nuclear fusion. They must realize the important role they can play in this great effort for planet earth.

Finally, Prof. Pielke should return to the Climate debate. While I have not read any of his papers, challenging extreme positions on Climate Change should be welcomed. I seriously question the inferred position that Climate Change is a “decade” driven event. The last Ice Age began about 2.6 million years ago. We are still in it. There have been several “glacial periods” and “inter-glacial” periods during the current Ice Age. As mentioned earlier in this paper the last glacial period ended about 10,000 years ago. “Climate Change” somehow implies a geologic event or time period. I have discussed how the term “Climate Change” came about. Frankly, the

terminology “Global Warming” is far more descriptive of what is currently taking place. We humans have been putting too much Carbon Dioxide (CO₂) into the atmosphere. We need to attack this problem and solve it calmly and deliberately. Fanatical positions will only delay the process. I suspect Prof. Pielke was only taking exception to extreme claims. I agree with him that there have been many. Greed and quest for power drive most of these claims as well as the actions currently being taken in response to the claims.