Abstract—Many theologians, including Pope Francis, assert that the increase of carbon dioxide into the atmosphere, caused by burning fossil fuel, endangers the planet, and urge us to stop. This article notes that fossil fuel has helped civilization advance worldwide, has alleviated abject poverty for billions, and that there is no substitute for it at this time. Thus there is a strong moral component on this side of the issue as well, a moral component which many theologians, politicians, commentators, and scientists, neglect. The bulk of this paper concerns assertions of damage from climate change, and then checks them out against available measurements in a way, which anyone can do. While increasing CO2 in the atmosphere may be a concern, it is hardly a planetary emergency. It is very likely treated as such by some, because of a new set of modern day ‘prophets’ who claim that they have access to knowledge that ordinary people cannot have. It compares climate ‘prophets’ to other such ‘prophets’ in American history.

Index Terms—climate change, internet check on climate change, climate prophets, climate change and theology

I. INTRODUCTION

The climate change controversy has a scientific, religious, and historical side. This article attempts to explore all three aspects, with emphasis on the scientific side. It starts with a brief discussion of original sin and biblical prophets. It continues with a discussion of several false ‘prophets’ in American history. It compares them to biblical prophets; i.e. claiming knowledge ordinary people cannot have. However unlike their biblical predecessors, these modern ‘prophets’ have no direct pipeline to God. This article asserts that those calling for a nearly immediate end to the use of fossil fuel fall into this category. Regarding the science, this publication is the attempt of an experienced scientist, although not a climate scientist, to navigate through piles of universally available data so as to evaluate the claims of the human induced climate change believers and alarmists are making. This paper lists some of the claims the believers and alarmists have been making, and will use an Internet search to find the appropriate data to check these out. The author used Google, and more often Google images to search for a graph for this or that. This is something anyone can do. While this is not characteristic of the way scientific papers do referencing, there is an overwhelming advantage to it for our purposes here. Anyone can do this anywhere, anytime. He does not have to go to say the Library of Congress to and search out a bunch of dusty, obscure journals.

However there is one word of caution. A Google search is not constant. Occasionally data changes from search to search. Several instances in course of preparing this paper, I had to eliminate a graph that seemed particularly convincing and important, because a day or so later, I could not find it again on Google images. Generally I have listed the link along with any graph presented, and to the extent possible have used links of well known organizations, NOAA, NASA, Institute of Energy Research, various government statistics, etc. The graphs presented here did seem to occur regularly in the search, and generally there were many similar graphs to choose from. I have been as careful as possible, and trust no substantial distortion has occurred.

It is important to note, that all such a search can do is give information up to the present, it cannot predict the future. There may many theories that predict disaster if we follow our present course; they may be correct, they may not be. Such a Google search has nothing to say about these predictions of the future. However it does give an accurate picture of the past and present. Furthermore, often there are obvious extrapolations of present data, which give important indications as well.

In a nutshell, this simple search shows that the claims of the believers and alarmists are for the most part wildly exaggerated. To this author, it is rather amazing that the mainstream media has not performed this simple check. Any competent science reporter for any major media outlet could do this, and almost certainly come up with these same results. Instead almost all of the major the media outlets have just swallowed the spoon fed claims of the alarmists, hook, line, and sinker. It is very likely that this will damage the media’s reputation for decades to come.

II. ORIGINAL SIN AND PROPHETS

One does not have to read very far into the bible to see that God was often quite dissatisfied with his creation and was more than willing to punish. He had hardly finished with creation when he told Adam and Eve in the Garden of Eden that “But from the tree of knowledge of good and evil shall not eat … (Genesis 2-17)”. As we know the serpent tempted Eve to eat the fruit, and this is often regarded as original sin. As punishment God banished Adam and Eve from the garden and forced the serpent to crawl only on its belly.

Not too many generations had passed before God again grew dissatisfied. “Now the earth was corrupt in the sight of God, and the earth was filled with violence (Genesis 6-11)”. God resolved to destroy the earth. However at this point something new arose; God decided to take a particular person, a person we will call a prophet, into his confidence warn him of the disaster and give him instructions on how to save himself and his family. Then God said to Noah “The end of all flesh has come before Me, for the earth is filled with violence…. I am about to destroy them with the earth” (Genesis 6-13)”. As we know, He told Noah to build an arc
and take a male and female of every animal onto it so they could ride out the storm. “And the rain fell upon the earth for 40 days and 40 nights (Genesis 7-12)” “And the water prevailed more and more on the earth so that all high mountains everywhere were covered (Genesis 7-19)”. After the flood receded, Noah and his entourage were able to begin anew.

The figure of the prophet is a recurring one in the bible and this article can hardly even scratch the surface. Another is of course the first patriarch, Abraham. God saw that Sodom and Gomorrah were filled with evil and he resolved to destroy it. He took Abraham into his confidence. Abraham bargained with God, finally getting Him to admit that if there were 10 righteous men there, He would refrain from destruction. But Abraham could not find the 10 necessary righteous men, so God destroyed the city, this time with heat and fire. “Then the Lord rained on Sodom and Gomorrah brimstone and fire from the Lord out of heaven (Genesis 19-24)”. The greatest prophet of all undoubtedly was Moses. He had many conversations with God and relayed them to the people. Some of the messages he communicated to his people were of vital importance, for instance the 10 commandments. Moses also conveyed many warnings to the Israelites from his conversations with God

“Beware, lest your hearts be deceived and you turn away and serve other gods and worship them. Or the anger of the Lord will be kindled against you and He will shut up the heavens so there will be no rain and the ground will not yield its fruit; and you will perish quickly …. ” (Deuteronomy, 11-16 and 17).

While this author is hardly a biblical scholar, the concept of human sin, and prophets who communicated directly with God, is very much a recurring theme of the bible. But are there prophets in the modern era, who use their specialized training, to see sins that nobody else can see? Our theme is that this concept is very much alive in the modern era, and generally these are false prophets with the capacity to do tremendous harm.

III. WITCHES

One of the strangest incidents in American history has been the Salem witchcraft trials (Starkey, 1949). “The Devil in Massachusetts” (Marion Starkey, 1949) published a very authoritative account. The contagion began in the house of Reverend Samuel Parris where his daughter, Betty, 9, and her cousin, Abigail, 11 lived. Also in there lived a lady slave Tituba, whom the family acquired in Barbados. Tituba regaled the girls with stories of voodoo and witchcraft. In January, 1692, the girls began to have frequent fits of hysteria. Soon other town girls began to join. Conferring with other clergy, Reverend Parris concluded that the devil and witches haunted the girls. While Ms Starkey wrote a decade or so before Elvis or the Beatles, she likely would have compared the Salem girls to those at one of these more contemporary concerts.

In any case, encouraged by Reverend Parris the town became convinced that witches haunted the girls. But who were the witches? The only way to find out was to have the girls point them out. It took some convincing, but finally the girls pointed out Tituba and two other ladies lower class women. But how do you prove witchcraft? Surely there was no physical evidence. The examinations and trials relied on what was called specular evidence. It is not easy to explain this to a sophisticated 20th and 21st century audience, and in fact, Ms Starkey had a hard time doing so.

The girls claimed they saw the specter, or essence, or spirit of the person performing witchcraft. In one instance at church, they fell into a fit, claiming they saw a witch’s Sabbath in the rafters above them. Others looked, but saw nothing. Yet the girl’s words were taken as absolute gospel. The spectral forms for late 17th century Puritans in Salem, were as real to them as your husband or wife, sitting with you at the dinner table is to you today.

The girls accused more and more people during the winter, spring and summer, including respectable people. One was Rebecca Nurse, a 70 year old woman who worked a farm with her husband and her 8 children. She was tried as a witch, and went to the gallows denying her guilt. Challenging the girls in any way could get you accused of witchcraft. One courageous man who did was John Proctor. He and his wife Elizabeth were jailed, creating 5 orphans. John was executed, but Elizabeth was spared due to her pregnancy. An image from the time of the execution of John Proctor is shown in Fig 1.

By September 1692, 20 had been executed and over 150, including several children, had been jailed. Conditions in the jail were horrible; the people who built the jail had never anticipated such a gigantic crime wave. Furthermore the time spent on the panic was time taken away from work; fields lay fallow, starvation was a real possibility. At this point, the new governor, William Phips had no choice but to take an interest, even though his main responsibilities lay elsewhere. He conferred with ministers not only from Puritan Massachusetts, but also from New York, where the Dutch influence was still strong. The upshot was he forbade spectral evidence. Without spectral evidence, the cases all collapsed. Also confessed witches were allowed to recant their confessions. The panic was over, it lasted less than a year.

So here we have our first example of a self appointed prophet, Reverend Parris and his team of assistants, pointing out sin, which nobody could see except them. He created only chaos in his wake. History lists him as a sinner, not a prophet.
IV. COMMUNISTS

Another ‘witch-hunt’ in American history, involving another false ‘prophet’ who saw human sin before anyone else could, is the McCarthy era in from about 1950 to 1954. On February 9, 1950 Senator Joseph McCarthy gave a speech in Wheeling, West Virginia in which he asserted that he had in his hand a list of 205 known Communists working in the State Department. Later that number changed to 57, then to 284, then 79, then 81, then 108; the number kept changing from one speech to another. But he never revealed the names on various lists.

It reminds one of the 1962 movie The Manchurian Candidate, starring Angela Lansbury, Lawrence Harvey, and Frank Sinatra. The movie was about a senator like McCarthy who kept asserting that he had lists of a large, and always varying, number of Communists in the United States Government. While McCarthy was a bachelor until 1953, the evil genius in the movie was Angela Lansbury, the senator’s wife. The movie senator (not too bright), kept asking his wife why he could not just give a number. Angela Lansbury kept insisting that the varying numbers were vital, they kept people interested, nobody disputed the presence of Communists in government, only the number. But he kept badgering his wife, and finally she reluctantly agreed. While he was shaking Heinz ketchup on his dinner, she allowed him to say okay, the number will be 57. By the way the movie had dream sequences, which constituted some of the most spectacular film making ever, as the scene shifted back and forth from dream to reality.

To get back to the actual Senator McCarthy, he grabbed more and more power in the Senate and used it to investigate Communist infiltration. He publically accused many, and many lives were ruined by these accusations.

He finally came undone when the Army accused him, and his chief counsel, Roy Cohn of improperly pressuring the Army to give a former associate, David Schine favorable treatment. McCarthy’s senate committee (actually chaired by South Dakota Republican Karl Mundt) investigated this. The hearings were televised and they transfixed the country. They went on for 36 days, involved 32 witnesses and millions of words. McCarthy’s bullying tactics finally turned off the country.

The key moment came when McCarthy asked the Army’s chief counsel, Joseph Welsh about communist leanings of one of his junior associates, Fred Fisher. Here is Welsh’s response:

Welsh: Until this moment, Senator, I think I have never really gauged your cruelty or your recklessness, Fred Fisher is a young man who went to the Harvard Law School and came into my firm and is starting what looks to be a brilliant career with us. Little did I dream you could be so reckless and so cruel as to do an injury to that lad. It is true he is still with Hale and Dorr. It is true that he will continue to be with Hale and Dorr. It is, I regret to say, equally true that he fear shall always bear a scar needlessly inflicted by you. If it were in my power to forgive you for your reckless cruelty I would do so. I like to think I am a gentleman, but your forgiveness will have to come from someone other than me.

After the hearings, he had lost all of whatever support he had in the senate and had lost the trust of the country. He was censured by the senate after the hearings, and died of cirrhosis of the liver (he was a very heavy drinker) in 1957.

So here we have another example in American history of a false prophet (McCarthy) convincing a large of people that he had access to knowledge that ordinary people could not have. He used this knowledge to create chaos in his wake and in the process ruined countless lives.

V. PRESCHOOL SEX ABUSE

In the 1980’s and 1990’s, there was another hysteria gripping the United States, brought on by another group of false prophets. These were the prosecution of preschool teachers for sex abuse of their students. The similarities between the trials of these day care workers in 1990’s and the Salem witchcraft trials of the 1690’s are so close as to be almost spooky.

At least 3 preschools were involved, initially the McMartin preschool in Los Angeles, run by the McMartin family; the Fells Acres Day Care Center in Malden, MA, run by Gerald Amirault and several members of his family; and the Little Rascals Day Care Center in Etenton NC, run by Robert and Betsy Kelly.

The original accusation was made by a McMartin mother, one diagnosed with acute paranoid schizophrenia and who later died of chronic alcoholism. In all cases the children (then 6 or 7, trying to recall events when they were 3 or 4) were prodded by social workers and psychologists, in some cases for months before they told about the abuse these interrogators wanted to hear about.

The stories the children told were fantastic. From one court record “Gerald Amirault had plunged a wide blade butcher
knit into the rectum of a 4 year old boy, which he then had trouble removing.” Other children told about satanic rituals in secret and magic rooms, in tunnels beneath the schools; they said they were forced to drink urine, were tied to a tree, were taken up and tortured in balloons, …. Who in his right mind would believe this?

A large number of teachers were arrested and brought to trial. In the McMartin school case, all were acquitted or had hung juries. However many of the teachers were jailed as long as 5 years awaiting trial. Those in Edenton and Malden were not so lucky. They were mostly convicted, several being handed multiple consecutive life sentences. Gerald Amirault served the longest sentence, 18 years. Ultimately all convictions were overturned as the various communities gradually came to their senses.

It is difficult to escape the conclusion that Salem in the 1690’s handled the panic better than Los Angeles, Edenton or Malden did in the 1990’s. In Salem, the panic lasted less than a year, these others lasted for years, decades. After the panic, Reverend Parris was fired. To my knowledge the psychologists, social workers and prosecutors have not been. Quite the contrary, Martha Coakley, one of the lead prosecutors in the Amirault cases won the Democrat nomination for the 2010 Massachusetts Bay colony provided partial compensation to the some of the victims and their relatives. But most important, none of the 1990’s governors of Massachusetts, California, or North Carolina showed the wisdom and courage that Governor Phips showed in the 1690’s. Confronted with what was obviously the 20th century version of spectral evidence, they could have devised reasonable rules of evidence for such cases. Instead they did nothing.

There is one thing, which the prosecutors got right. These children were abused and even brutalized, but not by their teachers. They were brutalized by the real 20th century witches, the psychologists and social workers, with their anatomically correct dolls and pseudo science, who forced fantastic, untrue testimony of abuse from innocent children. None of this evidence would pass the laugh or smell test. These children, now adults, all know that their testimony sent many innocent people to prison, some for long periods of time. How can they possibly live with themselves knowing that?

Fortunately, there is one good witch in the story. This is Dorothy Rabinowitz, a reporter for the Wall Street Journal. From the beginning, she perceived what was happening, she recognized the tremendous injustice involved. She wrote many columns exposing the fraud. Ultimately this series won her a Pulitzer Prize. Finally, and largely due to her efforts, everyone wrongly convicted was freed, the last one being Gerald Amirault, after he served 18 years. Her description of her meeting with him after he was released from prison could bring tears to the eyes of the most hardened cynic (Rabinowitz, 2004). Figure 3 is a photo of Gerald Amirault reunited with his family after 18 years.

So here we are again. There are different prophets, this time the psychologists and social workers. They see what others cannot. Using their specialized training, they can interview children and get them to recall what never happened, and in doing so, send many innocent people to prison. They were not prophets, but were villains, better they should have been jailed.

VI. CLIMATE CHANGE

6.1 Carbon dioxide in the atmosphere and the ‘unanimous’ scientific consensus

One can hardly open a newspaper or turn on the TV these days without seeing claims of the damage carbon dioxide into the atmosphere is doing to the environment. We must end the use of fossil fuel, sooner rather than later. But who can observe this damage or understand the detailed science? Since most cannot, we rely on another set of prophets, this time the scientists and their spokesmen, politicians, and commentators. But are these people false prophets? There is a good argument that for the most part they are. However it is also worth pointing out that there are many climate scientists who do their job, earn their living, and let the science, however they see it, one way or the other, speak for itself. They do not insist that society must do this or that to avoid catastrophe. By no means does this article imply they are false prophets.

Since the beginning of the industrial age, humans have been burning coal, oil and natural gas, and as such, have been putting carbon dioxide into the atmosphere. It is a greenhouse gas, which tends to warm up the atmosphere, in a way, which is easily understandable to most scientists. During the industrial age, the CO2 content of the atmosphere has risen from about 280 to about 400 parts per million. But the atmosphere is very complicated, and there is much more going on than just the greenhouse effect. Excess CO2 in the atmosphere is just one of the many things that can cause climate change.

Carbon dioxide is an odorless, colorless, harmless gas in small quantities. Every breath we inhale has less than 0.1% carbon dioxide; every breath we exhale, about 4%. It is not a
pollutant in the sense of sulfur dioxide or mercury. It is a vital nutrient for plants. Greenhouses generally operate with carbon dioxide rich atmospheres. Without atmospheric carbon dioxide, life on earth would not be possible. Nearly every carbon atom in our bodies and in the food we eat, has its origin in carbon atoms in plants and decayed organic matter in the soil, which in turn has its origin in atmospheric CO$_2$. (The carbon atoms in the fish we eat had its origin in CO$_2$ dissolved in oceans.) In fact, it is almost certain that the added CO$_2$ has aided plant life over the era of satellite measurements. Figure 4 is a plot of the earth provided by NASA, with the greener areas in Green, and the less green areas in red. Clearly the earth has supported much more plant life since the advent of satellite measurements, very likely largely because of the increase of atmospheric CO$_2$, at the very least this increase in plant life is coincident with the increase of atmospheric CO$_2$.

Many skeptics are retired scientists with impeccable credentials, or else have endowed chairs, so they do not have to worry about their next grant. Frederick Seitz, a former president of the National Academy of Science and former president of Rockefeller University, about as prestigious and establishment as one gets, spearheaded a petition among scientists disputing human induced climate change. It garnered 32,000 signatures. Here is a link (http://www.petitionproject.org). To justify the 97% figure, there would have to be an opposing petition signed by a million scientists.

To give some examples of skeptics, and qualifications of some of these skeptics, there is Roy Spencer University of Alabama at Huntsville, manages the NASA space based temperature measurements; Freeman Dyson, endowed chair at the Princeton Institute of Advanced Studies; William Happer, endowed chair at Princeton; Judith Curry, Former head of Earth and Atmospheric Science, Georgia Tech; Frederick Seitz (deceased) former president of the National Academy of Science; Ivar Giaever, Nobel Prize winner in physics, resigned from the American Physical Society because of its stand on climate change; Fred Singer, retired professor University of Virginia, designed many of the space based instruments used for environmental measurements; Richard Lindzen, endowed chair at MIT in the Earth Science Department; Patrick Moore, one of the original founders of Greenpeace, resigned when it turned radical; Harrison Schmitt, Ph.D, geology form Harvard, astronaut, last man to walk on the moon; Roger Cohen (deceased), retired science president of Rockefeller University, about as prestigious and

Believers point out that 97% of scientists who publish in the scientific journals on the subject are themselves believers. They get this figure by skimming large number of scientific articles in the major scientific journals, and counting those that see a human finger print on climate change, and those who do not; they come up with the 97% figure. But what are the editorial policies of the journals? As we will see, at least one very prestigious, high impact journal makes no bones about it; it will not accept articles by skeptics. What about the policy of those in the government who sponsor the scientific research? If you are a scientist and apply for government support of your research, your chance will be slim, if you are a skeptic. This author personally knows of one extremely capable scientist at a major Ivy League university, a skeptic of human induced global warming (Bernstein, 2010), whose grant was suddenly canceled for whatever reason (Popkin, 2015). Like oil and coal, green is big business now with lots of very powerful, well-funded interests protecting it. Perhaps it is even too big to fail.
So much for the ‘97%’ and “the science is settled”. In this author’s opinion, the reluctance of the mainstream press to further investigate the validity of these claims of scientific unanimity is one of the greatest examples of journalistic irresponsibility and dereliction of duty he has ever seen.

6.2 On the effort to replace fossil fuel with solar power

This author, and many others, are disturbed that those he calls alarmists are almost always concerned only with ending fossil fuel, but show little or no concern with what would replace it. Furthermore, they have little appreciation of the fact that fossil fuels have lifted billions out of abject poverty in the past few generations. The replacements they do propose (solar, wind and biofuel) are very unlikely, any time soon, to be able to fill the hole they are attempting to create, and they show little appreciation for that reality. How will we get the power we need? Modern civilization does depend critically on fossil fuel to power it. They cannot be concerned with such trivia. They are too busy saving the planet; powering it without fossil fuel is someone else’s problem, it is not their department! It reminds one of the rhyme from the old Tom Lehrer song about Werner von Braun:

Once rockets go up, who cares where they come down? That’s not my department, says Werner von Braun!

The total power the world uses now is roughly 13-14 terawatts. Roughly a billion people in the US, Europe, Russia and Japan each use about 6 kW (i.e. 6 terawatts total), leaving about 1 kW for each of the other 6 billion people on the planet. Currently the average Chinese uses about 25% of the power of the average American. In 2000, this figure was about 10%. In 2009 I was at a scientific meeting, where a high ranking member of the Chinese Academy of Science remarked on this, and said that they would not rest until their per capita power use is about the same as ours. They know that there is an unbreakable link between power and prosperity.

What is important is that fossil fuel cannot and will not be eliminated until another power source, becomes available at about the same quantity and price. The Chinese, Indians, Brazilians, Mexicans, Indonesians, Nigerians, … understand this unbreakable link between fossil fuel and prosperity, no not just prosperity, human civilization; even if we do not. They are sick of poverty, and who are we to blame them. Who are we to condemn them for escaping poverty the only way anyone knows how to do so; namely by using fossil fuels.

To illustrate how unlikely it is that renewable solar power can play any role in the world energy budget anytime soon, and the fact that the less developed world will not heed our advice to move away from fossil fuel, consider the Figs 5 and 6, taken from the BP statistical review of world energy 2013. Clearly renewables have a long, long way to go before they can supplant fossil fuel. Also it is the less developed parts of the world that are increasing the use of fossil fuel. The use of fossil fuel by the more developed parts of the world has leveled off.

![Figure 5](https://ourfiniteworld.com/2015/06/23/bp-data-suggests-we-are-reaching-peak-energy-demand)

Figure 5: Clearly it is extremely unlikely that solar power can replace fossil fuel any time soon as many insist. Simply ending fossil fuel without a replacement would impoverish the world and set civilization back centuries. https://ourfiniteworld.com/2015/06/23/bp-data-suggests-we-are-reaching-peak-energy-demand

![Figure 6](https://ourfiniteworld.com/2015/06/23/bp-data-suggests-we-are-reaching-peak-energy-demand)

Figure 6: It is the less developed parts of the world that are increasing energy use as they struggle to end their persistent poverty. https://ourfiniteworld.com/2015/06/23/bp-data-suggests-we-are-reaching-peak-energy-

A major effort has been made to support renewable solar power. It has been heavily subsidized for at least a quarter of a century. The American Federal support for climate change research over the past 20 years is shown in Figure (7) below. It was ~$12B in 2014. The average over this period was ~$7B per year, meaning that ~$140B has been spent on climate change research over the past 20 years! For this we got the amount of solar power affecting the world economy as shown in Fig (5).

![Figure 7](https://ourfiniteworld.com/2015/06/23/bp-data-suggests-we-are-reaching-peak-energy-demand)

Figure 7: Since 1993 the Federal government has spent ~$140B on climate change funding. http://www.gao.gov/key_issues/climate_change_funding_management/issue_summary

Reported Federal Climate Change Funding by Category, 1993-2014

![Figure 8](https://ourfiniteworld.com/2015/06/23/bp-data-suggests-we-are-reaching-peak-energy-demand)

Figure 8: Since 1993 the Federal government has spent ~$140B on climate change funding. http://www.gao.gov/key_issues/climate_change_funding_management/issue_summary
Some have argued that fossil fuel receives larger federal subsidies than renewables. While every industry, including fossil fuel, gets a variety of tax breaks (e.g., business expenses, depreciation, …), fossil fuel receives far less in direct subsidies than solar power. The American Energy Information Agency publishes data on federal support for various energy options. Their chart is in Figure (8). Renewable power is subsidized about $15B (a bit more than Fig. (7) indicates), and fossil fuel about $3B. However since renewable power only produces ~1% of the world’s power, it gets about 500 times as much subsidy per energy unit produced. Furthermore, fossil fuel pays taxes, as anyone driving up to a gas station to fill his or her tank knows.

Figure 8: It is solar, wind, biofuels that received the lion’s share of subsidies. https://www.eia.gov/todayinenergy/detail.php?id=20352

An enormous effort has been made to bring up solar power to a point where it can contribute to the world economy; clearly it has failed at this point.

6.3 The assertions of the climate ‘establishment’

A good place to start is with former President Obama. Apparently he saw a good portion of his legacy as his fight against climate change. On the White House web site was an entry, recently removed by President Trump, the clean power plan, asserting

THE CLEAN POWER PLAN

The Clean Power Plan sets achievable standards to reduce carbon dioxide emissions by 32 percent from 2005 levels by 2030. By setting these goals and enabling states to create tailored plans to meet them, the Plan will:

SAVE THE AVERAGE AMERICAN FAMILY:

- Nearly $85 a year on their energy bills in 2030
- Save enough energy to power 30 million homes in 2030

Save consumers $155 billion from 2020-2030

Also, in the summer of 2015, President Obama was in Alaska inspecting the retreat of glaciers, especially on a boat ride in Resurrection Bay. He pointed out the recent retreat of glaciers, arguing that this is proof of climate change caused by fossil fuel, and argued that government action can somehow prevent this in the future.

Now take a look at a December, 2014 speech of Hillary Clinton, who had hoped to succeed him as president, to the league of conservation voters (Pantsios, 2014).

“The science of climate change is unforgiving, no matter what the deniers may say. Sea levels are rising; ice caps are melting; storms, droughts and wildfires are wreaking havoc. … If we act decisively now we can still head off the most catastrophic consequences.”

Another claim (McNutt, 2015), is in the editorial of Science Magazine, the prestigious magazine of the American Academy for the Advancement of Science (AAAS).

But now with climate change, we face a slowly escalating but long-enduring global threat to food supplies, health, ecosystem services, and the general viability of the planet to support a population of more than 7 billion people.

The time for debate has ended. Action is urgently needed. (we must) set more aggressive targets, developed nations need to reduce their per-capita fossil fuel emissions even further…

Notice that she claims that ‘the time for debate has ended’. But in view of her editorial, can anyone believe that a skeptic would be able to publish a skeptical article in Science? Does the 97% really have any meaning in view of her statement? But in case anyone still does not get the idea, Dr. McNutt says that skeptics belong in one of the circles of Dante’s inferno. Figure 9, is her picture of this.

Figure 9: “where [would]…Dante…place all of us who are borrowing against this Earth…” Dr. McNutt’s picture of one of the circles of hell where the skeptics of human induced climate change ought to go.

The previous three authorities are moderate. At least they do not seem to insist upon an immediate, or nearly immediate end to the use of fossil fuel. Now let us take a look at a few of the more extreme alarmists.

Another candidate who hoped to succeed President Obama is Bernie Sanders. At the first Democratic presidential debate in October 2015, the last question asked, was what is the biggest national security threat facing the United States. You might think there are many such threats, North Korean nuclear weapons, ISIS, a nuclear Iran, and aggressive Russia, China building arming and claiming islands in the South China Sea. However to Bernie Sanders, the greatest national security
threat the United States faces is climate change! Another organization that advocates a nearly immediate break away from fossil fuels is 350.org, (web site at www.350.org), an organization led by Bill McKibben. Its goal is to reduce the concentration of CO₂ in the atmosphere to 350 parts per million. Considering that it is now over 400, and the CO₂ in the atmosphere lasts for centuries, it is unlikely to achieve this goal any time soon. On their web site, they state their goals:

1) Keep carbon in the ground
   • Revoke the social license of the fossil fuel industry
   • Fight iconic battles against fossil fuel infrastructure
Counter industry/government narratives

They illustrate this in Figure 10, taken from their web site.

To accomplish their goals, they use political pressure and protest marches that have attracted large crowds. But how many come to these protest marches by car, bus, or airplane; instead of by foot, bicycle, or on horseback? How does Bill McKibben get to them? And how do they propose to find the energy that powers modern civilization? Again, that is not their department!

Another organization advocating a nearly immediate abandonment of coal, oil and natural gas is the Sierra club, whose web site has links to ‘beyond coal’, ‘beyond oil’, and ‘beyond natural gas’, http://www.sierraclub.org. For instance on their web site they state in the Beyond Oil part, they clearly state that “where innovative green industries provide good jobs and supply 100 percent of our energy needs”

Apparently they wrongly believe that the world can convert to solar and wind right now, this only being prevented by corrupt coal, oil and gas companies. Powering civilization? A secondary consideration, and anyway, not their department!

Al Gore, the former American vice president has gone one step further. He suggests a specific time for ending the use of fossil fuels. In 2008, he called for completely ending the use fossil fuels in 10 years, by 2018! (Schor, 2008). What about his mansion and private jet?

6.4 The Paris Agreement

Recently the world has come together to sign a UN sponsored Paris agreement to limit climate change by restricting the use of fossil fuels. This has received a great deal of publicity; and recently even more as the President Trump has withdrawn from the agreement. Here is a link to the statement.

http://unfccc.int/resource/docs/2015/cop21/eng/l09.pdf.

Among other things, the agreement states: “Also recognizing that deep reductions in global emissions will be required in order to achieve the ultimate objective of the Convention and emphasizing the need for urgency in addressing climate change.”.

It continues “Emphasizing with serious concern the urgent need to address the significant gap between the aggregate effect of Parties’ mitigation pledges in terms of global annual emissions of greenhouse gases by 2020 and aggregate emission pathways consistent with holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 °C…”.

It assumes that an increase of 1.5 degrees centigrade, or at most 2 degrees will be calamitous. Does the claim that a one and a half degree temperature rise will cause calamity make any sense at all? Where the temperature has already risen by one degree centigrade since the start of the industrial age, and there is no sign of any impending calamity, will another half degree really produce one? In fact, in all likelihood, this one-degree rise has been beneficial. Over the millennia of human civilization, warm periods have been beneficial; cold, harmful. If a degree and a half rise would cause a calamity, I would think that once the temperature rose one degree, as it already has, things would be pretty bad.

Notice that the agreement gives no recognition to the role fossil fuel has played in advancing modern civilization; ‘global emissions’ instead are portrayed as something more like smoking, something one can just quit. There is no recognition of the fact that without fossil fuel, or a different energy source available at about the same quantity and price, the world will sink back into abject poverty, for all but the privileged few, as had been humanity’s fate for most of its existence. No recognition that even if their assessment of the climate threat is correct, there are competing priorities. No recognition that these competing priorities would have to be balanced in some way. No recognition that it is extremely unlikely that what it calls sustainable power (solar thermal, solar photovoltaic, wind and biofuel) can come anywhere near filling the void the agreement is attempting to create. No recognition of the wisdom of Richard Feynman when he said regarding the Challenger disaster: “For a successful technology reality must take precedence over public relations, for nature cannot be fooled.”

The consequences of enacting the treaty are major for human civilization, lifestyle, health and prosperity. Is it really necessary, or are they shouting “FIRE” in a crowded theater? Is it worth changing the lifestyle of billions, forcing most of
the world back into abject poverty? because of these theories, which, as we will see, have little data confirming them? But the main question is whether the Paris agreement has its facts and assertions right. The rest of this paper addresses this extremely crucial point.

6.5 The world the climate ‘alarmists’ are advocating
Before examining the facts ‘on the ground’, it is worth examining the consequences of eliminating fossil fuel before a substitute is available at the same quantity and price. There are all sorts of speculations of what the climate changed world might look like in 100 years. But what will the world look like right away if we kept carbon based fuel in the ground, as for instance Al Gore, Bernie Sanders, 350.org and the Sierra club would have us do? Then all we could burn for energy would be plants. But the United States as done this before. Until 1850, we burned mostly wood for energy. With a population of 30 million, we deforested half a continent. What about liquid fuel? Only possibility seems to be ethanol. Currently 40% of the American corn crop produces ethanol. This gives the energy of about 2% of the gasoline we use.

With the liquid fuel equivalent to only 2% of our gasoline, there certainly will not be enough to power very many cars or airplanes. Hence no cars or airline travel for anyone except for society’s grand pooh-bahs. Getting more than 20 miles from your house will be a real challenge. Every few years you might be able to take a trip on a crowded, uncomfortable railroad car.

Never mind airplanes, what about cars powered by electricity? Take a look at Figure 5. If we eliminate fossil fuel, only about 1/3 of electric power will remain; if the anti nuclear activists have their way as well, that 1/3 becomes 1/6. Think of what this would mean for your style. Air conditioning will be gone and space heating in the winter will be greatly reduced. Everyone will be cold all winter, indoors and out, and hot all summer. Getting to the store for food and clothing will be a difficult and time-consuming process. Modern high tech health care will be gone except for the very wealthy, as few people will have the time or energy to make the difficult trip to the doctors or dentists. Your house might have a small refrigerator and a few low wattage light bulbs. Manufacturing, which takes a lot of power will come to a nearly crashing halt. So will construction, especially large buildings in large cities, and large ships. This takes vast amounts of energy which solar and wind are unlikely to be able to supply. Look around your house at all the manufactured items; few of them will remain.

As figure 5 shows, solar power (i.e solar photovoltaic, solar thermal, wind and biofuel) hardly registers as an electric power source, in fact about the only solar source which produces any significant electric power is hydro electric, a power source we have been utilizing for about a century. Other solar sources are stuck at the few percent level, even after a quarter century of heavily subsidized development. Is there any possibility that these sources can provide power, any time soon, at the same quantity and price as fossil fuel? Judging from Figure 5, the answer has to be no.

6.6 The world temperature record

We start with the temperature record. For years NOAA developed the graph shown in Figure (11), along with the link. The obvious conclusion is that there has been a nearly 20 year hiatus in the increase of the world’s ground based temperature measurements.

http://www.carlineconomics.com/archives/303

Figure 11: NOAA data on ground based worldwide temperature measurements showing a recent 20 year hiatus in warming. The temperature has risen about one degree centigrade since the start of the industrial age

However NOAA now claims that there is no pause in global temperature rise and offers a new graph shown in Fig. (12), along with the link. Note Fig 12 is in Fahrenheit.

http://blogs.discovermagazine.com/colliedascape/2013/04/08/about-that-global-warming-pause/#.VkHZFoRhNSU

Figure 12. A new NOAA graph showing no slowdown in global warming. However it shows the same total one degree Centigrade temperature increase since the start of the industrial age.

Figure 12 shows a recent temperature rise of about 0.17°C per decade. However it also shows a 0.22°C rise per decade between about 1910 and 1945, when CO₂ input into the atmosphere was not an issue.

This latest graph shows data which could present a convincing case that man made global warming might well be happening. But what is striking to this author is that after nearly 20 years of measurements, NOAA decided that its measurements are incorrect. It suddenly presents new measurements much more in line with the attitude of its political bosses. Notice that both Figures (11 and 12) have a NOAA seal affixed. This is extremely important. For this author, who spent a career as a civil service scientist, it is vital that civil service labs, NOAA, NASA, NIH, NRL, ... maintain their integrity regardless of the wishes of their political bosses. In this author’s opinion,
NOAA’s ground based temperature measurements have lost all credibility; the data should be reexamined by a different expert organization, one with no position on climate change. So far NOAA has refused to make its data and new methodology publically available (Tollefson, 2015), asserting: “Because the confidentiality of these communications among scientists is essential to frank discourse among scientists, those documents were not provided to the Committee,” the agency said. “It is a long-standing practice in the scientific community to protect the confidentiality of deliberative scientific discussions.” This author has been a practicing scientist for over 50 years and this is the first he has ever heard of confidentiality of deliberative scientific discussions. Are we doctors, lawyers or priests all of a sudden? This is ‘confidential’ is especially inappropriate because these ‘discussions’ could have a major impact on the lives of billions of people.

Perhaps there has been a pause in the ground based world temperature rise, perhaps not. It will take more than this changing NOAA data to convince this author one way or another.

However it is important to note that ground based measurements are not the only way to measure temperature. They can also be measured from space, and this has certain advantages. It uses a single suite of instruments and samples the entire world simultaneously. NASA has been taking space based temperature measurements since 1979 and the record, archived by Roy Spencer at the University of Alabama Huntsville, is in Figure 13, along with the link. The space based measurements show a series of oscillations of varying periods. The raw data is shown in blue. A 13 month running average shows an oscillation with a period of about 5 years. Superimposed on this, in black is a much longer period oscillation of about 45 years. The space based measurement do show an increase in temperature, but a considerably smaller increase than the ground based measurements. Furthermore, this increase may not be a secular increase at all, but may result from the fact that they do not yet have data on a full period of the 45 year oscillation. Future measurements will answer this.

6.7 An Internet check on the assertions of the ‘alarmists’

Let us go through the assertions of the climate change ‘alarmists’. First consider President Obama’s assertion that reducing fossil fuel use by 30% will lower the utility cost for Americans.

A useful data point here is Germany. It has decided to embark on an energiewende, or energy transition. It has heavily subsidized solar and wind power; not only that, it has decided to phase out its 17 nuclear reactors. It has succeeded in transitioning about 25-30% of its electrical power to solar and wind, just as President Obama hopes to do in the United States. But despite the large government subsidy, the price of electricity in Germany is now at least triple its price in the United States, and it is rising fast. Shown in Figure 14 is a plot of the price of a kilowatt of electricity in many different countries, along with the link.

http://www.theenergycollective.com/lindsay-wilson/279126/average-electricity-prices-around-world-kwh

Figure 14: Cost of a kilowatt hour of electric energy in various countries.

Based on this, the author believes that with President Obama’s plan, it is much more likely that the American consumers will be hit with large price hikes, just like their brethren in Germany.

But even with the energiewende, Germany still needs coal fired power for when the sun does not shine, the wind does not blow, or to replace lost nuclear power. Shown in Fig 15 is a plot, along with the link, of per capita carbon input into the atmosphere of a bunch of countries. German carbon input is considerably greater than that of its European neighbors. If powering the country without carbon dioxide input into the atmosphere is the goal, isn’t nuclear powered France a better example than solar powered Germany? The French pay about half for their electric power and input just over half the carbon dioxide per capita into the atmosphere as the Germans.

Figure 15: Per capita CO₂ input into the atmosphere for various countries. President Obama also cited the glacial retreat as proof of global warming caused by burning fossil fuel, and implied
that this is something the government can control. Again, this is something one can check out with a Google or Google image search. Simply search 300 years of glacial retreat. The results are shown in Figure 16 along with the link. Clearly, worldwide, glaciers have been retreating at about the same rate for at least 200 years. As an example of a single Alaskan glacier system, consider Glacier Bay. This had been explored many times since the 1700’s. Shown in Figure 17 is a map of Glacier Bay with red lines indicating the glacier’s edge at various times. Clearly most of the glacial retreat in Glacier Bay took place before 1907. In other words glaciers have been retreating at about the same rate both before and after a great deal of carbon dioxide had been emitted into the atmosphere.

http://blog.heartland.org/2014/05/glaciers-and-global-warming/

Next consider Hillary Clinton’s December 2014 speech where she made many assertions about climate change: Sea levels are rising; ice caps are melting; storms, droughts and wildﬁres are wreaking havoc… . There have always been storms and wildﬁres, so let us assume that she meant that these problems are getting worse because of the emission of carbon dioxide into the atmosphere. Let us check out these assertions out one by one. Her first assertion is that sea levels are rising. This is very simple to check out. Figure 18 is a graph of sea level rise, along with the link. Note that this is IPCC data, the very data the UN uses to produce its reports on climate change. Clearly sea levels have been rising at about 20 cm per century since about 1920. There is no indication of an increase in rise as more carbon dioxide has been emitted into the atmosphere.

https://www.ipcc.ch/publications_and_data/ar4/wg1/en/figure-e-5-13.html

Figure 18: Sea level over the past century. It has been rising at a steady 20 cm per century.

Her next assertion is that ice caps are melting, and this is somewhat difficult to check out. First of all, one must be careful to distinguish between floating ice in the Arctic and land based ice in Greenland and Antarctica. If there former melts, there will be no rise in sea level. If the latter were to melt, there could be an enormous rise, and this is what we consider here. However it is very cold in these two places. It has long been known that in Greenland and Antarctica, ice has been melting in some places and thickening in others, but it has been difficult to measure the net effect (Graham, 1999) However these days you can hardly turn on your TV these days without seeing a gigantic ice mass, thousands of year old, breaking off and floating into the sea to begin its melt, with the commentator saying doom is at hand.

Nevertheless a study (NASA, 2015) seems to indicate that melting ice in some places (for instance near the Antarctic peninsular) is more than balanced by thickening ice in others (Eastern and interior western Antarctica). Here is quote from Jay Zwally, the leader of the NASA study;

“We’re essentially in agreement with other studies that show an increase in ice discharge in the Antarctic Peninsula and the Thwaites and Pine Island region of West Antarctica,” said Jay

http://joannenova.com.au/2010/04/the-debate-continues-dr-glikson-v-joanne-nova/

Figure 16: Two graphs showing melting glaciers. Clearly the trend toward melting glaciers has been proceeding at about the same rate since about 1825.

https://stevegoddard.wordpress.com/2013/07/19/alaskas-most-famous-glacier-retreated-eight-feet-per-day-between-1794-and-1897/

Figure 17: Map of Glacier Bay, Alaska showing the glacier edges at various times in history. The red lines mark the glacier boundaries at the various years shown.
Zwally, a glaciologist with NASA Goddard Space Flight Center in Greenbelt, Maryland, and lead author of the study, which was published on Oct. 30 (2015) in the Journal of Glaciology. “Our main disagreement is for East Antarctica and the interior of West Antarctica – there, we see an ice gain that exceeds the losses in the other areas.” Zwally added that his team “measured small height changes over large areas, as well as the large changes observed over smaller areas.”

Figure 19 is a summary of ice melting and forming provided by NASA’s most recent measurements. Clearly ice is melting in some places (in fact is seems to be melting fast in a few regions) and thickening in others, but the net effect is an increase in ice of about 0.82 gigatons (billion tons) per year.

http://www.huffingtonpost.com/ben-rosen/hurricanes-white-r-thou_b_80301.html
Figure 20: Major hurricanes in the United States decade by decade

http://scienceblogs.com/gregladen/2013/05/21/are-there-more-tornadoes-because-of-global-warming/
Figure 21: Year by year of strong tornados in the United States 1954-2012. There has been a slight decreasing trend

Ms Clinton also said that wildfires are also wreaking havoc. Again, this is easy to check. Figure 22 is a graph for the United State; Figure 23, for Canada, along with the links.

http://whyfiles.org/2011/wildfire-2/
Figure 22: Data on acres burned by wildfires in the United States since 1960
Clearly there has been no increase in wildfires that can be attributed to man made climate change. In the United States, the rate has been about constant except for a peak between about 2004 and 2008. In Canada, these peaks appeared earlier, in the early 1980’s and 1990’s, but otherwise there has been no upswing in either country. The Canadian National Fire Database of the Government of Canada has issued figure 23.

Now let’s take a look at data for droughts, which she also claims is wrecking havoc. Figure 24, shows the percentage of American land suffering extreme drought over the past century, taken from the National Climactic Center of NOAA. The worst droughts were in the 1930’s and 1950’s. Other than that, there has been no particular, observable increase in droughts, at least up to now.

What about Marcia McNutt? In addition to preemptively rejecting a paper like this for the journal Science, and saying that this author belongs in one of the circles of Dante’s Inferno, she also said that man made climate change will cause slowly escalating but long-enduring global threat to food supplies. Let’s see what the data says. One graph is shown in Figure 25 (Max Roser (2015)). If there is to be any “escalating but long-enduring global threat to food supplies”, there is no evidence of it yet.

To summarize, not a single one of the assertions quoted here by President Obama, Hillary Clinton or Marcia McNutt, which can be checked out by measured data up to now, can stand up to serious scrutiny.

6.8 Specular evidence in the climate change discussions?

One question is whether there is an analog to specular evidence in the global warming controversy. Obviously there is not in the literal sense. However broadening the definition to include evidence, which seems reasonable, but on closer examination is meaningless, there is specular evidence. Either side can use it, but so far the believers have used it more, perhaps because it is more difficult for the skeptics to use it to prove a negative.

The data set describing the earth’s climate is vast, but we know that over the last century the earth warmed by about 1 °C. However a believer might point out that one large country has seen a temperature rise of 10 °C and say it proves global warming. True, but meaningless. Given the average, some other part of the planet about the same size must have cooled by 9 °C.

The Antarctic ice is a very rich area for specular evidence. As Figure 19 shows, ice is melting rapidly on a portion of the coast, regions 21 and 22 on the map. Surely this ice melt makes for dramatic footage on the evening news. However looking at all of Antarctica, the net effect is ice forming, not melting.

A recent instance involved no less a climate observer than President Obama. In the winter of 2013-14, he pointed out that in the west, the winter was very mild and there was virtually no snowpack in either the Rockies or Sierras. He
used this to argue the case for government action on global warming. However had he expanded his view, he would have seen that the east and Midwest had a very cold, snowy winter. Chicago did not get warmer than 0°F for 23 days, and every state in the eastern half of the country, except Florida, was completely or partially snow covered for weeks. For those of us in the east, all we could talk about was the ‘polar vortex’. Would the believers seriously claim that the extra CO2 in the atmosphere is responsible for both the heat in the west and the freeze in the east? Let’s get real!

The lesson: If there is a vast data set, it is always possible to pick out one small subset, which agrees with your case. To this author’s mind, it is the equivalent of spectral evidence in the physical world.

6.9 Numerical simulations of climate

So the actual data on what is claimed to be the many effects of climate change up to now, gives no support to notion that we are anywhere near a calamity. These assertions then rest entirely on theory. The theory of greenhouse warming is simple, and most reading this paper in this journal know it. However, the earth’s atmosphere is extremely complicated and much more is going on besides the greenhouse effect. To do theory requires that one perform computer simulations. However these computer simulations are difficult to do, and depending on the assumptions the modeler makes, one can get many different answers. A typical graph showing the enormous variation in the results of numerical simulations is shown in Figure 26.

http://www.attivitasolare.com/wp-content/uploads/2015/01/ClimateModelsVsReality-1024x768.png

Figure 26: A compendium of many different numerical simulations of predictions of global temperature rise. The actual measurements are also shown as the red and blue solid lines with the dots.

All of these calculations show more temperature rise than were measured from 1975 to 2012 (i.e. the present). This makes the case that climate computer simulations have a long way to go before one can base public policy on them, especially public policy that would have a major effect on the lifestyle of billions of people.

Amazingly, (Vossen) in Science Magazine has recently published what can only be characterized as an expose on the fact that many different groups doing numerical simulations use many different ‘fudge factors’ in their codes in order to get their desired result. These simulations are far from being first principle simulations.

VII. The climate ‘prophets’

So here we are with what may be another group of self appointed ‘prophets’, these claiming that we have to cease use of fossil fuel immediately so as to ‘save the planet’. However unlike their biblical predecessors, these prophets have no direct pipeline to God. They claim that their assertions are based on the nearly unanimous conclusion of scientists. Never mind that the scientific community is far from united on this issue. Also they point out that we are sinners. We burn coal, oil and gas and despoil the natural environment in doing so. All we have to do is stop doing this and ‘leave the carbon in the ground’. What could be easier? Or as God herself said “Now what I am commanding you today is not too difficult for you or beyond your reach”. (Deuteronomy 30.11). Never mind that this coal, oil and gas have allowed civilization to flourish in many parts of the world, producing a more prosperous, healthier, longer lived, and better educated population; as well as a cleaner environment. It has alleviated abject poverty for billions. Turn off the oil, coal and natural gas, and the poverty comes roaring back for all but the privileged few. The world would then be as it has been for most of human history, the privileged few living well off of animal and human energy, that is the energy of other humans, while the rest of us live in squalor. Following their guidance would create only chaos and poverty, but this time for the entire civilized world, not just a few as was the case for Reverend Parris, Joe McCarthy and the psychologists and social workers. There is an incredibly important moral issue here too.

But more realistically, there is no need to panic and end fossil fuel use anytime soon. The measurements today simply do not indicate the need to; and the computer simulations of the future cannot even predict the present. In a nutshell, neither is reliable enough to justify an enormous change in lifestyle for billions of people. Even in a worst-case scenario, there is plenty of time to react. After all, over the centuries, the Dutch have reclaimed thousands of square miles from the sea, and it is possible, given time, to develop economical carbon free fuel, most likely nuclear.

Nevertheless, according to these new ‘prophets’, we are all guilty of an original sin, which only they can discern. I will bet that nobody reading this can say for sure that he or she has actually observed climate change in his or her lifetime. I’ll bet that anyone can recall intense summer heat spells, and freezing, as well as very mild winters, as far back as they can remember. But these new ‘prophets’ see what we cannot. Unless we drastically change our ways, these modern prophets warn us of impending heat waves, floods, intense storms throwing down fire from the heavens, rising sea levels, wildfires…. What could be more biblical? As Jules Winnfield (AKA Samuel L. Jackson) interpreted God’s will in Pulp Fiction: “And I will execute great vengeance upon them with furious rebuke; and they shall know that I am the...
Lord, when I shall lay my vengeance upon them” (Ezekiel 25:17). Or as God himself said “But if your heart turns away and you are not obedient, and if you are drawn away to bow down to other gods (i.e. material prosperity) and worship them, I declare to you this day that you will certainly be destroyed” (Deuteronomy 30.17 and 18).

VIII. CONCLUSIONS

Since solar power is so far from becoming an important player in the world energy budget, and since the scientific community is far from united on whether excess CO2 in the atmosphere will have a significant environmental effect, and since none of the assertions of imminent climate crisis can stand up to serious scrutiny, the question is should we be on a breakneck pace to reduce fossil fuel use in the hope that solar power can replace it? This author’s answer is no. The cost to civilization would be catastrophic if solar power should fail, as it has so far.

ACKNOWLEDGMENT

This paper is an essay on both physical and social science; it has not been supported by any outside agency public or private. This paper is based largely on three of the author’s works. These are papers in the International Journal of Advance Research (IJAR), June 2016, a paper with the same name as this,

http://www.journalijar.com/article/9945/original-sin,-prophe-
ts,-witches,-communists,-preschool-sex-abuse-and-climate-c-
hange/

An earlier paper in IJEAS:

A simple way to check on the assertions of damage from climate change, IJEAS Dec 2015

https://www.ijeas.org/download_data/IJEAS0212036.pdf

and the American Physical Society Forum on Physics and Society, July 2017,

http://www.aps.org/units/fps/newsletters/201707/climate.cfm

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