Undermining Energy Production: An Economic and Philosophic Analysis of the State of Energy Production

Brian P. Simpson
National University

This paper shows that the world faces an energy crisis but that the crisis is not due to the depletion of fossil fuels. It is a manmade crisis. The crisis is being caused by environmentalist and other statist policies around the globe. The paper shows that the solution to our energy problems is the abolition of government controls restricting our ability to gain access to energy products. It states that the motivation for the restrictive policies stems from the morality of self-sacrifice, while the morality of rational self-interest provides the basis for abolishing the controls.

INTRODUCTION

America and the world face an energy crisis. Oil and gasoline prices are at high levels in real terms and will probably go higher. Real natural gas prices have displayed an upward trend over the last few decades and will probably continue to rise in the future. While real electricity rates show a downward trend, that could change if the U.S. Environmental Protection Agency (EPA) is able to restrict the production and use of coal as it would like. Coal is a significant fuel for electrical power plants. In general, energy prices are rising in real terms and this will probably continue, especially when the effects of the recession subside.

The crisis we face has nothing to do with running out of fossil fuels. It is a manmade crisis. Politicians think oil companies are to blame. During the 2008 run-up in oil and gasoline prices, then presidential candidate Barack Obama said he will "go after the oil companies" and New York Senator Charles Schumer said "Oil companies are racking up obscene profits…while American families are stretched to the limit by skyrocketing gas prices." (Jacoby, 2008) In 2011, Obama went after oil companies again for the run-up in oil and gasoline prices during that period. (Anonymous, 2011) But the crisis we face is not being caused by greedy oil, natural gas, and electric power companies. The crisis is being caused by sinister intellectual and political forces acting in American culture and throughout the world.

These forces are engaging in numerous activities to make it harder to produce energy. They are making it harder to drill for oil in Alaska and offshore. They are making it harder to mine and use coal. They are making it harder to build oil refineries and electric power plants. They are drowning the energy industry in a flood of regulations. They impose onerous taxes that make it less profitable to produce oil and add significantly to the price of gasoline. They oppose the use of nuclear energy.

It is taken for granted that we must be subjected to policies and laws that undermine energy production. However, our ability to produce energy does not need to be restricted. Abundant energy sources exist in the form of fossil fuels, nuclear power, and hydroelectric power to produce all the energy

we need. The knowledge and technology we possess today to produce energy is so advanced that people do not need to be threatened, as they have been in California, with rolling blackouts and periodic "power emergencies." Neither do we need to conserve energy nor suffer from rising or volatile energy prices.

Some people believe we need to restrict energy production to stop such phenomena as global warming, pollution, and the depletion of natural resources. However, this is false. I will address each of these below. The real crisis is mankind's self-inflicted wounds to the energy industry.

If the forces undermining energy production head unrestrained down their logically consistent path, they will make it impossible to produce the energy we need to enjoy—and even live—our lives. We depend on energy to light, heat, and cool our homes and workplaces. We depend on energy to power machines such as tractors and combines, which help produce the food we need to survive. We depend on energy to transport ourselves and our property by train, truck, car, plane, and ship. We depend on energy to produce the electricity we need to run numerous types of devices that further our lives in countless ways (such as computers, microwave ovens, MRI machines, etc.). We depend on energy products to fuel the Industrial Revolution on which our very lives depend.

A hallmark of the Industrial Revolution is the replacement of human and animal muscle power with manmade or machine power. (Reisman, 1996, pp. 76-78) For instance, we no longer have to plow fields by horse or ox thanks to the existence of tractors powered by fossil fuels. Or, instead of sawing wood by hand we are able to saw it in massive and technologically sophisticated facilities. Likewise, instead of sewing clothing by hand we are able to sew it with the aid of advanced machinery. The same is true for virtually every other good that is produced. As a result, we are able to produce far more (and far higher quality) food, lumber, clothing, and so on.

The dependence of human life on the Industrial Revolution, and the energy that powers it, cannot be stressed too much. Before the Industrial Revolution, the average human lifespan was about twenty-five to thirty years and people performed back-breaking labor from dawn to dusk all for a standard of living probably lower than that experienced in the poorest "Third-World" countries today. Prior to the Industrial Revolution, people could barely produce enough food to keep themselves alive and often could not even produce enough for this, as many died from famine. Periodic plagues, brought about by diseases that are easily prevented and cured in industrialized societies, wiped out huge portions of the population in many areas. The Black Plague of the fourteenth century in Europe killed at least one-third of the population in a few years. People were miserably poor, toothless and lame, lice infested and flea ridden, and slept with their livestock to keep warm. Most people in industrialized societies would be dead if not for industrialization, so they owe their lives to industrialization.

The deadly forces destroying our ability to produce and obtain the energy we need are *environmentalism* and *statism*. To prevent these destructive ideological forces from wreaking even more havoc upon mankind than they already have, we must understand what they are, how they cause such destructive economic consequences and, more importantly, why they lead to such destruction. Further, we must understand the alternative ideas that can lead to a prosperous energy industry and, by implication, to prosperity in general.

THE ECONOMIC EFFECTS OF ENVIRONMENTALIST AND STATIST IDEOLOGY ON ENERGY PRODUCTION

Environmentalist and statist ideology have destructive economic consequences on the production of oil, gasoline, and electric power through the regulations and government controls they spawn. I will first focus on the ways in which these destructive ideas have undermined the ability to produce oil and gasoline. I will then discuss how they are making it harder to generate electricity.

Oil and Gasoline Production

Environmentalists and statists are harming our ability to produce oil and gasoline in a number of ways. They oppose drilling for oil, the building of refineries, and the use of less expensive octane boosters. By advocating and enacting regulations, they force oil refiners to produce a much larger number

of gasoline blends. They impose and threaten price controls and so-called price-gouging laws. They levy taxes on the production and sale of oil and gasoline. They subsidize the production of "alternative" fuels at taxpayer expense. The existence of statist governments around the globe is also making it harder to produce oil and gasoline. All of these controls lead to higher priced oil and gasoline. Let us see, in detail, just how they have made it harder to obtain the oil and gasoline we need.

The Effect of Environmental Regulations and Lawsuits on Oil and Gasoline Production

In the United States, environmentalists have been the most influential in undermining oil and gasoline production. They restrict the production of oil and gasoline in a variety of ways, both through their advocacy of regulations and their activism in the courts. For example, because of environmental regulations, oil drilling is severely restricted in some areas, such as in northern Alaska and on the continental shelf of the U.S. Many areas declared "conservation areas" based on environmentalist ideas are completely off limits to oil drilling, such as in the Arctic National Wildlife Refuge (ANWR). These actions directly reduce the supply of oil and gasoline and in so doing increase their prices.

Some claim, as an argument for not drilling in ANWR, that if ANWR was opened to oil drilling it would not reduce the price of oil very much because the amount of oil that can be produced there would be small relative to consumption in the United States and even smaller relative to worldwide oil consumption. However, this argument could be used to justify preventing the use of many oil deposits and every individual oil well—any source that would not add significantly to total production. The result, of course, would be to radically reduce the production of oil. This is exactly the type of argument that must be rejected to ensure an adequate supply of oil. Any oil deposit that can be profitably drilled can help ensure that we have sufficient access to the oil we need, and the deposits in ANWR certainly fall into that category.

Environmental regulations and lawsuits impose prohibitive costs and financial risks on oil companies. For example, the EPA brings numerous lawsuits against refiners that cost gasoline producers billions of dollars. In addition, the Clean Air Act Amendments of 1990, as well as the Energy Policy Act of 2005 (which effectively banned the oxygenator MTBE), make it more costly to produce gasoline. As a result, no new refineries have been built in the U.S. in over thirty years. In fact, the number of oil refineries in the U.S. has actually declined since the last one was built in the 1970s and total refinery capacity has declined since the early 1980s.[1] This makes it harder to produce gasoline and is particularly harmful in the face of the dramatic increase in demand for gasoline that has occurred during the last three decades as the economy has expanded.

The adverse impact of fewer refineries and lower capacity in the face of rising demand is particularly acute when a refinery is out of service due to damage (such as after a hurricane) or maintenance. With rising demand and diminished refining capacity, we are now that much more dependent on making sure every refinery is up and running. Capacity utilization rates for oil refineries in America averaged around 70 percent in the 1980s. Today they average just under 90 percent and prior to the recession they averaged more than 90 percent.[2] With less excess capacity in the system, any spike in demand or unscheduled supply outage can cause the price of gasoline to soar.

In addition, the growing age of refineries means they require more maintenance and repair, which leads to more down time and less production. Furthermore, in the face of diminished capacity and rising demand, each refinery must be used more intensively, which can lead to higher maintenance costs and still more down time.

Environmental regulations, such as the Clean Air Act Amendments of 1990, have made it harder to refine oil into gasoline by forcing refiners to produce at least eighteen separate blends of gasoline for different regions of the U.S. and different times of the year. Environmentalists allegedly want the multiple blends for the purpose of reducing air pollution even though oil experts say advances in automobile engine technology make the different blends unnecessary. (Glain & Howe, 2004) Nevertheless, every spring refineries must shut down temporarily to switch over to producing a "summer blend" of gasoline. This blend is more expensive than the "winter blend" and contributes to the price of gasoline being higher in the summer than in the winter. Further, while refineries are shut down in the spring, the supply of

gasoline begins to dwindle and prices rise. Prices also rise in the late summer/early fall, in part, due to refineries having to shut down to switch over to producing the "winter blend." The price of gasoline tends to go through the following price fluctuation during the year: it spikes in the spring, falls a bit during the summer months (but generally remains higher than it is in the winter months), spikes in late summer/early fall, and then falls to its lowest levels in the winter. Every year the media, public, and politicians blame oil companies for the spikes in the price of gasoline. However, every year the primary cause is environmental regulation.

While it is true that there are other factors that cause fluctuations in the price of gasoline throughout the year, such as supply manipulations by the Organization of the Petroleum Exporting Countries (OPEC), speculation on the price of oil, increased demand for gasoline for driving during the summer, and decreased demand during the winter, environmental regulations are the primary factor causing the annual fluctuations. OPEC does not engage in manipulations that consistently fit the pattern of seasonal price fluctuations. Speculation does not appear to fit the seasonal pattern either. Besides, speculators cannot arbitrarily affect the price in a systematic manner. If they did, they would lose money and eventually disappear from the market. To make money at speculation, one must correctly anticipate independent factors that drive the price (such as the environmental regulations being discussed here or political instability in oil producing nations). In this case, it would be the independent factors that are the primary cause of the price fluctuations.[3] If the price of gasoline was driven by the seasonal demand for gasoline for driving (sans the environmental regulations) it would tend to spike during the summer months and be at its lowest level during the winter months without the spikes in the spring and late summer/early fall.

The price of gasoline would also tend to be lower overall, throughout the year, without environmental regulations. But forcing refiners to produce multiple blends of gasoline keeps prices high. It does so because of the time and expense required to make the switch between producing the different blends and the greater difficulty of managing a more complex production process.

Requiring the use of ethanol as an additive to gasoline is another way environmental regulations make it more expensive to produce fuel for our cars. For instance, ethanol's properties make it hard to transport. It must be shipped by truck to refineries from factories in the Midwest, since it cannot be produced in the refineries and does not travel well through pipelines. (Allen, 2003) Ethanol also generates only about three-quarters of the energy of regular gasoline, which lowers the gas mileage for cars and increases fuel costs per mile driven. In addition, to the extent that the increased demand for corn to produce ethanol increases the price of corn, ethanol prices will be that much higher. The government subsidies to ethanol producers do not improve the situation. All they do is encourage the production of even greater quantities of an expensive fuel and transfer the cost from producers and consumers of the fuel to taxpayers.

The multiple-blend requirement can also make localized supply reductions more severe and thus local prices more volatile. If every area uses the same type of gasoline and supply is reduced in one area temporarily, say due to a refinery in that area being damaged and taken out of service, then the affected area can easily draw in supplies of gasoline from other areas, ameliorating the harmful effects of the reduced supply of gasoline in that area. However, if due to environmental regulations that area requires a special blend of gasoline, it might not be able to draw in supplies from other areas or it might only be able to draw in supplies from areas that are farther away. This will make the supply reduction more severe and the resulting price spike much worse. This was exactly the situation faced in Phoenix, AZ, during the summer of 2003, when the Tucson-to-Phoenix gasoline pipeline ruptured. As a result, prices spiked by almost twenty-five percent in about three weeks, and at one time as many as sixty percent of Phoenix area gasoline stations ran out of fuel and had to shut down. The special blend of gasoline used in the Phoenix area in the summer made the situation much worse than it needed to be. (Marson & Vandeveire, 2003), (Antosh, 2003), and (Garay, 2003)

Oil companies are routinely blamed for high gasoline prices. For example, a Field Poll in 2004 showed 77 percent of Californians blamed oil companies for the run-up in gasoline prices during the spring of that year. (Talev, 2004) However, environmental controls are really the culprits for high gasoline prices. It is no accident that in California environmental regulations are among the strictest in the

nation and the price of gasoline tends to be among the highest in the nation. In fact, the U.S. Department of Energy (USDOE) explicitly states that gasoline prices are higher and more volatile in California than in other states because, "The State of California operates its own reformulated gasoline program with more stringent requirements than Federally-mandated clean gasolines." (USDOE, 2006a) San Francisco is the home of the environmentalist movement and Californians are paying the price as a result.

The fact is that oil companies have done everything they can to produce more oil and gasoline, and environmentalists have done everything they can to stop them. Without the oil companies, there would be no oil and gasoline and our standard of living would be miserably low. There would be no heating oil to heat our homes, no oil to produce electricity, fewer lubricants, and no fuel to power our automobiles, boats, trains, trucks, buses, aircraft, and myriad other machines. Without environmental regulation, the oil companies would have a greater ability to produce oil and gasoline and our standard of living would be much higher.

The Effect of Other Regulations and Authoritarian Governments on Oil and Gasoline Production

Although environmentalists are responsible for many regulations that undermine our ability to get the oil and gasoline we need, they are not the only statists making it harder to produce and purchase oil and gasoline. Statism comes in many forms. For example, statist politicians impose onerous taxes on gasoline that make it much more expensive. The average, combined state and federal taxes on a gallon of gasoline are about 49 cents in the U.S. (American Petroleum Institute, 2011) Given that the current average price of regular, unleaded gasoline is $3.39 per gallon in the U.S. and that the prices of manufactured goods, such as gasoline, tend to be governed by their costs of production (including taxes), abolishing these taxes would immediately reduce the price by about 14 percent.[4] This would be the quickest and easiest way to reduce the price of gasoline. The resulting reduction in tax revenue could easily be accommodated by reducing government spending an equivalent amount. Such spending reductions would not be hard from a fiscal standpoint given that federal, state, and local governments waste billions—even trillions—of dollars each year on welfare and other inappropriate forms of spending.[5]

While reducing welfare spending may be unpopular, it is nonetheless the right thing to do, both morally and economically. Morally, taxpayers have a right to their own lives—including a right to the income they earn—and should not be forced to support the welfare recipients. Economically, the reduction in government interference in the economy would help to increase the productive capability. This would be achieved by increasing the incentive for welfare recipients to work. The decreased taxes would also make it possible for taxpayers to keep more of the income they earn, which would give them a greater ability to engage in economically productive activities. As a result, the overall standard of living in the economy would increase.[6]

Historically, statist politicians have also made it harder for people to get the gasoline they want by imposing "windfall-profits taxes" on oil companies. Such taxes were imposed from 1981 to 1986 in response to historically high oil and gasoline prices. Unfortunately, American oil companies were not able to benefit from these high prices because their profits were viciously taxed away by the federal government. While these taxes have not been imposed since the 1980s, they are threatened periodically on various occasions and thus have the potential to be imposed again if it is believed that oil company profits are "too high."

Such taxes undermine the productive capability of American oil companies and make the U.S. more dependent on Arab oil. Profits not only provide the incentive to produce more of a product, they also provide the means to do so. When prices and profits are high, a greater portion of profits is generally reinvested in the business, expanding production and increasing supply. Obviously, this cannot happen to the extent profits are taxed away. By expropriating profits from oil producers, statist politicians have hindered the expansion of the industry. Not only does the U.S. have less oil and gasoline production capacity as a result, it is more dependent on sources of oil that fund terrorist activities. The terrorists are richer and are able to wreak more havoc on the West thanks to the actions of statist politicians in the U.S.

Price controls or so-called price-gouging laws—and the threat of such laws—have also harmed the ability to produce oil and gasoline and made the U.S. more dependent on terrorist oil. Maximum price

controls were imposed during the Arab oil embargo of the 1970s and have been imposed or threatened after natural disasters, such as hurricanes. Such controls keep the price of goods artificially low, reducing profits and investment in the industry and thereby reducing supply.

During the Arab oil embargo, U.S. oil producers could have gained at the expense of Arab producers. At that time, Arab producers refused to sell oil to the U.S., which would normally have the effect of pushing prices higher. However, Arab producers would not have benefited from the higher prices, since they were refusing to sell. American oil companies could have profited and expanded at the expense of the Arab producers, but none of this occurred because statist politicians in the U.S. prevented prices from rising.

Price controls not only destroy the incentive and ability to produce a good, they increase the quantity of a good demanded because of the artificially low price. The result is a shortage: people attempt to purchase the good at the controlled price but are unable to find enough available. In the gasoline market in the 1970s, this led to long lines at gasoline stations and rationing by the government, where people were forcibly restricted to buying gasoline only on certain days based on the license plate numbers on their cars.

During the embargo, the prices of oil and gasoline needed to rise. Higher prices would have signaled to consumers to reduce their consumption of a good that was in reduced supply. More importantly, the increased price would have diverted supplies of oil bound for other countries to the U.S., since the higher price would have made it more profitable to sell the oil in the U.S. Further, the higher price would have given American producers an incentive to expand their production. These actions would have helped to ameliorate the harmful effects of the embargo. Unfortunately, statists prevented this from happening and thus were responsible for making the effects of the oil embargo worse. In fact, we are even worse off today to the extent that American oil companies were unable to expand their production capacity because of the controls.

Price controls have had particularly harmful effects in areas after natural disasters. For example, after Hurricane Hugo passed through South Carolina in 1989, price controls were imposed on gasoline and other products in Charleston, SC, which was among the coastal areas hardest hit by the hurricane. Before the price controls were imposed, the price of gasoline had reached $10.95 per gallon. This gave strong incentives for suppliers of gasoline outside Charleston to bring their supplies into the city, helping to lessen the harmful effects of the hurricane. People could make enough money to take time off from their regular jobs to purchase goods outside Charleston and bring them to Charleston to sell them at much higher prices.

In response to the higher prices, a "price-gouging" law was passed by the city of Charleston, placing a ceiling on the prices of badly needed goods. This caused the flow of goods into Charleston to stop. Shippers would stop and sell their goods outside the harder-hit Charleston area. Buyers in Charleston waited in long lines (sometimes up to five hours) and still often came away with nothing. Fortunate buyers in Charleston would sometimes take what they purchased in Charleston, at the forcibly imposed low prices, and drive outside Charleston to sell the goods at the higher uncontrolled prices. Shortages became so bad that military guards were required to protect shipments and maintain order. (Gwartney, Stroup, & Sobel, 2000, p. 98)

Local statist politicians wreaked havoc on Charleston all to prevent what they call "price gouging." Price gouging is a term used to denounce a seller whenever anyone *feels* that the price he is charging is "too high." Price gouging is a smear term used to denounce the legitimate and moral act of an individual selling his product—his own property—for a price he thinks people are willing to pay. "Price gouging" is what novelist and philosopher Ayn Rand called an "anti-concept": "an artificial, unnecessary, and (rationally) unusable term, designed to replace and obliterate some legitimate concepts." (Rand, 1967, p. 176)

How much does a seller need to raise the price of a good for it to be considered "gouging"? Is a ten or twenty percent rise considered "gouging"? If twenty percent, then why not twenty-five percent or fifteen percent? No rational answer can be given to these questions because the claims of "price gouging" are arbitrary, as are so-called price-gouging laws. There is no rational standard for gougermongers to use to

determine whether a price is "too high." Claims of "price gouging" are based on people's emotions. This can be seen in the following quote from Charlie Crist, a supporter of laws prohibiting it who was the Florida Attorney General at the time, "I don't think it would be too hard to give it [price gouging] some significant definition in the mind of a juror *who would probably be very upset* with someone trying to take advantage of a catastrophe." (Mufson, 2006) (Emphasis added.) The implication is clear. People are to be convicted of an alleged crime simply because their actions make jurors upset. Any conviction that rests on jurors being upset is a travesty of justice and sets a precedent that will lead to worse travesties. "Price-gouging" laws should be abolished. There is no rational basis for such laws.

Individuals have a moral right to their own lives and property and this means they have the right to determine the price that others will pay to purchase their property from them. If owners of gasoline decide that $10.95 per gallon is the best price—or even $100.95—then they have a moral right to charge such a price. Buyers always have the right to refuse to purchase the product. Those who invoke the use of the term "price gouging" show their utter ignorance of economics and their desire to reach for a gun, through the government, to forcibly impose their whims on others. Such laws have led to nothing but destruction because they violate the freedom on which production—and human life—depend, as the case of Charleston after Hurricane Hugo eloquently illustrates.

It must be emphasized that even the mere *threat* of price controls or so-called windfall-profits taxes can damage the productive capability. Such a threat can discourage investment in an industry because of the financial risk created by the threat of price controls and higher taxes. Further, they can reduce the amount by which producers might raise the prices of their products, to avoid the screams for maximum price controls and windfall-profits taxes, and thus reduce the incentive and ability to expand their productive capacity.

Finally, statists have not restricted themselves only to the United States. Statists have acted with far more destructive results abroad, such as in Venezuela, the Middle East, Russia (and the former Soviet Union), North Africa, and Mexico, among other places. These are places in which most of the world's known oil deposits exist. In fact, over three-quarters of the world's proven oil reserves are under the control of national oil companies (oil companies that are controlled by national governments). (Mares and Altamirano, 2007) Statists have not been held back in these locations by a history of respect for individual rights and freedom, as in the U.S. In these regions, rights have been violated and property has been nationalized on a massive scale.

The attack on the private Russian oil company Yukos is just one example. The Russian government locked away the company's CEO and principal shareholder, Mikhail Khodorkovsky, in a Siberian prison and pushed the company into bankruptcy through trumped-up charges of tax evasion and a mock trial. Most of the assets have ended up in the hands of the state-controlled oil company Rosneft, now Russia's largest oil company. (Anonymous, 2007a) Another example is Venezuela's socialist dictator Hugo Chavez seizing control of oil fields in Venezuela operated by private, foreign oil companies. The latest round occurred during the first half of 2007, in which he used a government decree to seize majority control of oil fields in the Orinoco River belt. Oil analysts say the only reason he did not confiscate the properties outright from the companies is because he needs their expertise to help him perform the complicated refining process necessary to turn the extra heavy, tar-like oil extracted from these fields into a usable synthetic crude. (Hays, 2007) Statist power grabs such as these abrogate the freedom to produce and thus inhibit or destroy the ability and incentive to produce. They lead to much less production than could otherwise be achieved in these areas.

People need to be free to use their minds to think and act in their own rational self-interests for production to be possible. The miserably low standard of living in statist countries around the world, such as in Cuba, North Korea, the Sudan, and the former Soviet Union and East Germany, just to name a few, and the high standard of living of the relatively free countries, such as the U.S., Japan, and Great Britain, is a testament to this fact. East Germany and North Korea vs. their counterparts of West Germany and South Korea come as close as one can get to an economic experiment and demonstrate that freedom leads to greater production and statism leads to misery and poverty. Both West Germany (and now Germany) and South Korea have progressed forward to the extent that they have protected the rights and freedom of

individuals.

To improve the world's ability to produce oil and gasoline, statist policies need to be abandoned in the major oil producing countries. Freedom and the profit motive must be established to provide the maximum possible ability and incentive to produce oil and gasoline. If property rights are protected in these countries—which means, if property owners are protected from others forcibly preventing them from producing, using, and disposing of material values—Western oil companies would be eager to invest and expand production. Indeed, Western oil companies were the ones that developed oil production in most of these countries in the first place, only to have their property confiscated by statist regimes.

As a part of their movement toward freedom and capitalism, authoritarian governments that confiscated property from Western oil companies (such as in the case of Venezuela above but also including such cases as Iran and Saudi Arabia, where the oil industries were nationalized through similar means) should give the confiscated property back to the companies to return it to its rightful owners. Western oil companies used their expertise, technology, and capital to develop the oil fields. Returning property that rightfully belongs to them would send a clear message that, once and for all, property rights will be protected. This will provide a strong incentive for Western capital to flow into these regions. A greater and more steady flow of oil would soon follow.

The Demand for Oil and Gasoline

While environmentalists and statists are responsible for the price of oil and gasoline being higher than it otherwise would be, they are not the only factors causing the price of oil and gasoline to rise in the last couple of decades. The demand for oil and gasoline has risen dramatically in China and India due to the implementation of relatively more free-market oriented government policies in these countries. These increases caused China to move from being the fifth largest consumer of oil in the world in 1990 to second in 2010. India moved from twelfth to fourth during the same time period. In addition, China moved from being the sixth largest net importer of oil in 2000 to second in 2010, while India moved from eighth to sixth during the same period.

China's increases have been particularly large. From 1990 to 2010, annual oil consumption increased in China by 6.9 million barrels-per-day (b/d), which is the largest increase of any country. In contrast, consumption has increased in the U.S. by only 2.2 million b/d during the same time period, which is the second largest increase. Further, net imports increased in China from 2000 to 2010 by 3.5 million b/d, while they *decreased* in the U.S. by 1.2 million b/d during the same period. China's increase in net imports is the largest increase in net imports during this period. The increases in consumption and net imports in India during the above corresponding time periods were 2.0 million and 870,000 b/d, the third largest increases in both categories.[7]

Before going any further, let me make it clear that I am not saying that China and India are capitalist countries. China is nominally communist and socialist, while India is very socialistic. Socialist countries are countries in which governments initiate physical force against the citizens of the countries to control the means of production and violate freedom in other ways. In recent decades, governments of both countries have relinquished some of their control and moved slightly toward capitalism, although in an unprincipled, pragmatic fashion. As a result of their moves toward capitalism, the production of wealth has increased in these economies, which is why the demand for oil has increased. Since oil and gasoline production has not kept pace with demand in these countries, they must import more of these goods from abroad, increasing the worldwide demand for them and driving up their prices.

Nonetheless, increased demand for oil and gasoline in these countries is not, ultimately, a threat to Americans getting the oil and gasoline they need. If China and India continue to make their economies more capitalistic, their productive capabilities will continue to expand dramatically. This means, over time, companies in China and India will be able to provide more capital goods and/or investment funds to produce more oil and gasoline in their own countries and around the world. So China's and India's increased production contains the means to bring the price of oil and gasoline down by helping to increase the global production of these goods.

The real threat to Americans—and Chinese, Indians, and everyone else—getting the oil and

gasoline—and all other goods—they need is environmental regulations and other government controls. They stand in opposition to what the production of oil and gasoline—and everything else—requires. The production of wealth requires the freedom for individuals to pursue their own rational self-interests; that is, the freedom to drill for, transport, and refine oil and gasoline. In a word, we need capitalism. Capitalism is the political and economic system that protects freedom; it protects people from compulsion and coercion by the government and private parties. If freedom is protected, the profit motive will provide an enormous, selfish incentive to produce abundant supplies of oil and gasoline. This is the benevolent type of result to which greed leads if it is based on a commitment to pursue life-promoting values and thus to acquire wealth and income through voluntary trade.

The Volatility of Oil and Gasoline Prices

The prices of oil and gasoline are volatile. This is due, in part, to the fact that oil and gasoline are what economists call inelastic goods. That is, the quantities demanded of oil and gasoline are not very sensitive to changes in their prices. This means that when supply is reduced, prices must rise dramatically before people will reduce their consumption. Oil and gasoline are inelastic because there are no practical alternative fuels, so people have nothing else to switch to when the price of gasoline rises and they will continue to consume almost the same amount even in the face of a large price rise.

The prices of oil and gasoline would normally be more volatile than many other goods' prices due to their inelasticity, but people often think speculation causes oil and gasoline prices to be more volatile than they otherwise would be. While speculation may be the proximate cause of oil and gasoline prices fluctuating dramatically during a specific time period (such as in early 2011, when speculators appeared to be driving up the price of oil due to political instability in many Middle Eastern countries), speculation overall tends to have a dampening effect on price fluctuations. Speculators buy goods when prices are low and sell when prices are high. This is how they make money and this tends to smooth prices because speculators counteract the prevailing trends. To the extent that speculators fail to buy when prices are low and sell when prices are high, and thus make prices more volatile, they lose money and become less influential or are completely eliminated from the marketplace and thus will have less effect on prices. Moreover, as stated previously, speculators cannot arbitrarily affect the price of a good in a systematic manner. They must correctly anticipate the effect independent factors will have on the price. Here, the independent factors driving the price are the ultimate cause of the price fluctuations.

The role of government interference in the form of the Federal Reserve (and central banks more generally) must be recognized here in making prices more volatile. The Fed makes housing prices, stock prices, and commodity prices more volatile by manipulating the supply of money and credit and thus fueling economically unsound speculation. When credit is easily forthcoming not much forethought and due diligence are put into the investments people make, and prices soar. When the supply of credit is contracted or even just the rate of increase is reduced sufficiently, prices collapse.

This type of interference fueled the run up in housing prices in the U.S. through 2006 by pumping massive supplies of money into credit markets from 2001 to 2004. Then, when the Fed tightened the flow of money into credit markets from 2004 to 2007, housing prices collapsed and individuals and companies began to go bankrupt. This caused an exodus of money out of housing and stocks and into commodities such as oil, driving up the price of oil through the summer of 2008. As the Fed's financial crisis turned into a full-blown recession, even the price of oil began to collapse in late 2008. The Fed's easy money policy since the depths of the recession in 2008 and 2009 added to the volatility of oil and gasoline prices in 2011 as well.

Speculation does not make it harder to get the oil and gasoline we need and it does not make the prices of oil and gasoline more volatile. In fact, it makes it easier to get the oil and gasoline we need and prices less volatile. Again, environmental regulation and other government controls are the actual threats. They reduce the supply of oil and gasoline and make them more expensive. They force us to switch between producing different blends of gasoline during the year. They make oil and gasoline prices more volatile by fueling speculation. They do this through unstable, statist governments in the Middle East and through the manipulation of the supply of money and credit by central banks. In addition, by reducing the

supply of oil and gasoline to the point that we have little or no excess capacity, they make it so small changes in supply or demand cause drastic swings in prices.

Electricity Production

As with oil and gasoline production, electricity production is also being undermined in the U.S. Environmentalists oppose the use of nuclear power, they oppose the use of coal, and they oppose the building of dams, power plants, and transmission lines. In addition, other statists have imposed rate caps (maximum price controls) on the sale of electricity since the early days of the industry. All of these are wreaking havoc on the electric power industry.

The Effect of Environmental Regulations and Lawsuits on Electricity Production

Environmentalists have reduced the supply of electricity in a number of ways. They oppose the building of nuclear power plants. They have made it much more expensive than necessary to build such plants, they have even prevented such plants from operating after the plants have already been constructed, and they have caused nuclear power plants to be taken out of service long before the plants reached the limits of their useful lives. Greater use of nuclear power could significantly increase the supply of electricity.

The Diablo Canyon Power Plant in San Luis Obispo County, California is just one example of environmentalists' opposition to nuclear power. Regulatory delays created by environmentalists forced the construction of the plant to take seventeen years. By contrast, it takes only five to six years to build a nuclear power plant in France. Further, the cost of the Diablo Canyon plant increased twelve times because of the obstacles created by environmentalists: from $500 million to $6 billion. (Isaac, 2001)

The Shoreham Nuclear Power Plant on Long Island, New York is another example. The construction cost for the plant was $5.5 billion. It was decommissioned in 1994 before it ever went into commercial operation due to irrational, environmentalist fears of nuclear power. (Anonymous, 1994)

Environmentalists consider no number of safety precautions or shutdown mechanisms safe enough to warrant the use of nuclear power. However, nuclear power is routinely used around the world without any problems. Ten nations get more than forty percent of their electricity from nuclear power, led by France with 78.5 percent. (Stuckey, 2007) The two common examples used until recently to justify abandoning nuclear power, Three-Mile Island (TMI) and Chernobyl, do not justify abandoning it. TMI provides proof that safety systems can be built into nuclear power plants to prevent the reactors from completely melting down. Despite media reports, TMI's safety features worked as planned, and the additional radiation that was emitted into the surrounding area as a result of this incident was far less than that emitted naturally from the ground each year. (Ray, 1992)

Chernobyl is an indictment of the destructive nature of authoritarian government, in this case in the form of communism and socialism. The safety features of the power plant were inadequate by the standards of nuclear power plant construction in the West at the time and, to the extent they were built into the system, they were often purposely circumvented. Communists and socialists do not respect the rights of others. Therefore, they have no problem putting others at risk—sacrificing others—by building unsafe nuclear power plants (or unsafe products in general). Building unsafe products is not a problem for statists because sacrificing individuals is a routine part of statism.[8]

Even the nuclear crisis at the Fukushima power plant in Japan after the earthquake and tsunami in 2011 does not provide justification to abandon nuclear power. While this disaster does provide evidence that greater safety precautions should be taken in the construction of some nuclear power plants (such as possibly building higher seawalls to protect those built in areas susceptible to a tsunami), one must not forget the huge number of nuclear power plants routinely used around the world in a safe manner. Instead of justifying abandoning nuclear power, we must learn from the Fukushima and TMI incidents to build safer nuclear power plants.

Ultimately, the key to making sure nuclear power plants—and all other products—are as safe as possible is to protect individual rights and freedom. This means establishing private ownership in the provision of all goods and services, including nuclear power. It means the profit motive must reign free of

government controls. The profit motive gives producers an incentive to provide safe products to customers. One does not grow rich through the profit motive by harming or killing off one's customer base.

Further, in a capitalist society, individuals are held responsible for their own actions. This means if they build products that could be potentially dangerous to others they must take the appropriate safety measures. Under capitalism, no man can violate another man's right to his own life or create an objective threat to this right, such as by building a nuclear power plant without taking the appropriate safety precautions. Capitalism, unlike socialism, does not survive by some men living off the sacrifices of other men, but by men offering rewards to each other through voluntary trade.

In contrast, government provision of goods leads to less safety and quality because a government does not act based on the profit motive. This means it has little incentive to do things efficiently and effectively, which leads to higher costs, less innovation, and therefore a lesser ability to produce safe, high quality products. In fact, government regulation of safety and quality often harms and even kills people. For instance, the Food and Drug Administration is responsible for causing more deaths and harm to people than it prevents due to its regulation of prescription drugs.[9]

In addition to more nuclear power plants, the building of more dams would increase our supply of electricity, as well as improve flood control and increase the supply of drinking water and recreation areas. However, environmentalists oppose the building of dams because they want rivers to be free-flowing and untouched by man. In fact, a 2002 study shows that more dams have been dismantled for environmental reasons than for any other reason in recent decades. Not surprisingly, California leads all states in the removal of dams for environmental reasons. (Pohl, 2002)

The Edwards Dam on the Kennebec River in Maine is just one dam that has been dismantled for environmental reasons. The dam was removed to give fish access to upstream spawning grounds. The "interests" of the fish were considered more important than the generation of electricity. The Edwards Dam is just one victim of the misnamed Electric Consumers Protection Act of 1986, which elevated consideration of the protection of fish and wildlife to equal status with power generation in hydroelectric projects. (Pohl, 2002) and (Paulson, 1999)

Hydroelectric power requires no consumption of fossil fuels or nuclear material and creates no pollution. Environmentalists should embrace it given their desire to have "renewable" sources of energy that do not pollute. In fact, as I will show below, environmentalists oppose this source of energy because they oppose all production by man.

Environmentalists also oppose the strip mining of coal, as well as the use of coal-burning power plants. Michael Brune, executive director of the Rainforest Action Network, states this explicitly with regard to coal-fired power plants. He wants environmentalists to "move on to greater goals like banding together politically to shut down coal-fired power plants." (Williams, 2007) President Obama agrees with this goal. As stated during the election campaign in 2008, he wanted to put the most aggressive cap and trade system into place:

> [E]very unit of carbon or greenhouse gases emitted would be charged to the polluter. That will create a market in which whatever technologies are out there that are being presented, whatever power plants that are being built, that they would have to meet the rigors of that market and the ratcheted down caps that are being placed, imposed every year. So if somebody wants to build a coal-powered plant, they can; it's just that it will bankrupt them because they're going to be charged a huge sum for all that greenhouse gas that's being emitted. (Anonymous, 2008)

Since cap and trade has been shot down in Congress, environmentalists are using the EPA to impose onerous rules on electricity producers to make it much harder to use coal. These government controls, known as the "EPA train wreck," could impose thirty major regulations, 170 major policy rules, and hundreds of billions of compliance costs on businesses. Many of the regulations specifically target shutting down coal-fired power plants. Up to twenty-two percent of such plants could be shutdown if all

the proposed regulations are implemented. It will create a significant increase in energy costs. (Hammerton, 2011)

Environmentalists oppose strip mining and the use of coal over alleged concerns about pollution, global warming, and altering the natural landscape. Both the increased use and strip mining of coal could dramatically improve our ability to produce electricity. This would make it less expensive to provide the electricity that people need.

An earlier example of the attack on coal-burning power plants began with the EPA's attempt to impose more onerous rules for ozone and soot emissions on electric utilities in 1999. When an appeals court ruled against the EPA, saying it was overstepping its legal bounds, the EPA, several environmental organizations (including the Natural Resources Defense Council [NRDC] and the Sierra Club), and the states of New York and Connecticut promptly filed suits against several coal-burning facilities in the Midwest and South. The suits claimed the defendants were violating existing provisions of the Clean Air Act by making major modifications to their facilities without seeking the required permitting and making the necessary upgrades to their pollution control devices, which the act requires whenever a major modification is made. The utilities denied that the new permitting or upgrades needed to be made, claiming that the changes were not major. Several more suits against additional facilities were filed throughout the new millennium until, eventually, fifty-one facilities were involved. The suits culminated in a case heard by the Supreme Court in 2007. The high court sided with the EPA but sent the case back down to a lower court for further review. (Rubenstein, 2000), (Silverstein, 2006), and (Beveridge & Diamond, 2007)

In another example, in 2004 public utilities were sued by several environmental organizations, several states, and the city of New York for allegedly contributing to global warming. This suit claimed that utilities should be liable under public nuisance laws. A district court threw the suit out but an appeals court ruled that the suit could go forward. The case was heard by the Supreme Court in 2011. While the High Court found in favor of the utilities this is not a victory for energy producers and users. Utilities will still be subjected to regulations of emissions by the EPA. The High Court has assured us of that. In 2007, the Court ruled that the EPA can regulate the emission of carbon dioxide (CO_2). All of these lawsuits add significantly to the cost of producing electricity. Due to the large legal fees, this is true even if the utilities ultimately prevail in the suits. (Suarez & Coyle, 2007) and (Silverstein, 2010)

Environmentalists have also routinely attempted to block the construction of new power plants and transmission lines by engaging in lawsuits, imposing regulations, and creating other obstacles that make them more costly, and sometimes impossible, to build. Fewer transmission lines mean a lesser ability to get electricity from the plant to the end users. Fewer power plants mean less electricity produced and a higher price of electricity.

In one case in 2006, several environmental groups, including the NRDC and Communities for a Better Environment, sued to block the building of six new power plants in Southern California. This in the state that experienced rolling blackouts not all that long ago and that still experiences periodic "power emergencies" when the demand for electricity approaches the capacity of the electrical system. (Hanson, 2006)

In another example, environmentalists hampered a California electric utility's attempt to provide more reliable electricity services by interfering with the building of a major transmission line from southeastern California to the San Diego region because the line would run through state park or national forest land. San Diego desperately needs another major transmission line into the region. As stated by the California Energy Commission (CEC), "the San Diego region's transmission problems are acute and graphically illustrate the importance of adequate transmission." (CEC, 2005, p. 92) San Diego Gas & Electric (SDG&E) has reported, "virtually all of the imports [of electricity into the San Diego region] are delivered through two points of interconnection. Neither of these points of interconnection is capable of meeting the peak load import requirements of the area if the other is out of service." (USDOE, 2006b, pp. 45-46)

Multiple transmission lines improve reliability by reducing dependency on any one line. With multiple lines, if one line becomes unusable then electricity can still be provided to the region through the

other lines. Reliability also improves by running lines through different areas. This makes it so multiple lines are less likely to be damaged or destroyed by manmade or natural disasters. If all lines run through one area, they can all be destroyed by one disaster, and electricity to the region is cut off. However, if each line runs through a separate area, a disaster in one area will leave other lines untouched, so electricity is still free to flow.

While the transmission line was finally approved by the California Public Utilities Commission (CPUC) and construction is in progress on the line, it took three years after the proposal was first made by SDG&E to get the line approved. There is much opposition to the line by environmentalists and this opposition has made the line much more expensive: the estimated cost is now almost $2 billion, double the original estimate. Part of this cost is due to environmentalists forcing SDG&E to build the line along a more costly path to avoid state park and national forest land. The new route also reduces the improvements in reliability the new line will bring because it follows the same route as an existing line for a much longer distance and, in general, is much closer to the existing line than the original route proposed by SDG&E. As costly as it has been for SDG&E just to get the transmission line approved, it is likely to face additional costs since opponents of the line have vowed to continue to fight the CPUC's approval and the actual building of the line.[10]

San Diego, and California in general, desperately need more power plants and transmission lines. However, this has not stopped environmentalists from opposing building more of them. As an alternative to more plants and lines, environmentalists advocate conservation as the solution to our electricity problems. But conservation is not a means of meeting the electricity needs of people. It is a means of depriving people of the electricity they need and forcing them to suffer unnecessary inconveniences and potential harm from rolling blackouts.

In addition to the above problems, fewer power plants and transmission lines also mean we are more dependent on existing plants and lines. These will have to be used more intensively and will break down more, require greater maintenance cost, and be out of service more. When plants and transmission lines are out of service, whether due to maintenance or repair, the lack of supply is exacerbated.

Finally, the reduced use of nuclear power, coal, and hydroelectric power to produce electricity exacerbates the problems environmentalists have caused with regard to the prices of oil and gasoline. Reduced use of these forms of power mean an increased demand for oil to produce electricity. This reduces the supply of oil available to produce gasoline and increases the prices of oil and gasoline.

The Effect of Other Regulations on Electricity Production

There are many ways in which statists other than environmentalists hamper the production of electricity. One way is through restrictions on who can produce electricity. Government regulators typically restrict who can enter the electric power industry by providing producers government franchises to be the only producer of electricity in a given geographic region. This limits competition in the industry and leads to higher costs of production, less supply, and higher prices.

Regulators limit entry into the market because, it is claimed, the electric power industry is a so-called natural monopoly; that is, an industry in which one firm can most efficiently supply the market. Statists also claim that electricity rates need to be regulated by the government because otherwise the one supplier would charge arbitrarily high prices. While it may be true that one supplier is the most efficient method to use to produce electricity, it is still a violation of individual rights and economically inefficient to prevent entry and regulate prices. When firms are guaranteed certain rates of return, through regulated prices, they have little incentive to improve efficiency and quality. This is why regulated utilities, such as electricity, water, natural gas, cable television, and, in the past, telephone, are notorious for being inefficient and providing poor customer service.

Competition in a free market is the best way to determine what is the most efficient way to produce a good or service. If provision of the good or service by one firm is the most efficient method, the one firm that survives will have to prove itself in the marketplace. It would probably have to offer contractually fixed rates to ensure customers that it will not arbitrarily raise rates if it becomes the only supplier. It would have to *earn* the right to be the only supplier by out competing rival firms in voluntary trade. It

could not obtain its sole-supplier position through the government's use of force to keep competitors out.

In the context of today's economy, in which large utilities have already been given sole-supplier positions through government force, it would be appropriate to start out with contractually fixed rates for customers during the process of abolishing government regulation and establishing the freedom of competition. Since electricity grids are connected across wide areas today, in many cases electricity buyers will be able to immediately benefit from the incentive suppliers will face to drive costs and prices down, and quality up, due to other firms selling the same good in a given geographic region. For areas that do not have multiple suppliers, the sole firm will have to provide reasonable, and probably contractually fixed, rates to keep potential competitors out. The legal freedom to enter the industry will also provide a strong incentive for a sole supplier to become more efficient and improve quality to keep potential competitors out. This is something that regulated utilities with guaranteed rates of return have little incentive to do. America's utility industries are in terrible shape today, in part, due to government protection from competition.

The regulated electricity prices referred to above are a form of maximum price controls. Maximum price controls have been much more onerous in the electric power industry than in the oil and gasoline industry. Price caps on electricity have existed since the early days of the industry. As discussed in the section on oil and gasoline, price controls reduce the supply of a good and encourage over consumption by forcibly keeping the price below what it otherwise would be.

Setting price caps below the price that would be established in a free market creates a greater likelihood that more electricity will be demanded than can be supplied. The result is brownouts, which have occurred in the eastern U.S., and rolling blackouts, which have occurred in California. Brownouts occur when there is not enough electricity to support the demands for it, so the lights dim. Rolling blackouts are the government's way of preventing wider blackouts due to demand that exceeds the capacity of the system. If electricity users were to attempt to draw more electricity from the system than the system could provide, widespread failures of the system would occur. Hence, the government "shuts off the lights" in localized regions to reduce the demand for electricity.

Electricity problems have been most prevalent in California, and this is no accident. Californians are paying for having the nation's strictest environmental laws not only through a reduced supply and higher price of gasoline, but through a lesser supply and higher price of electricity as well. California has an abundance of energy resources that power companies are eager to exploit, including rapidly flowing rivers descending from the Sierra-Nevada Mountains (for hydroelectric power), large petroleum deposits under the continental shelf, and plenty of coastline to take advantage of cooling water in the Pacific Ocean (for nuclear power). (Wakeland, 2001, p. 16) Using these resources, power companies could easily produce the electricity Californians need. However, environmentalists refuse to let them do so. California has the most onerous environmental restrictions in the nation on the building of new power plants. (Oliver, 2001) Environmental regulations, along with price caps and the increased demand associated with a growing population and expanding economy, have pushed California's electricity grid to its limits. While the current recession may provide a temporary reprieve from rolling blackouts, they will return once the economy recovers if California does not adequately expand its electricity production capacity.

Some people blame California's electricity problems on the attempt to "deregulate" the electricity markets in the state in 1996. However, this is a straw man—in fact, California's electricity market was never deregulated. While price caps were lifted temporarily in California across the state in the wholesale market and in San Diego County and the adjacent portion of southern Orange County in the retail market, the California state government still regulated and controlled the production and distribution of electricity through the California Power Exchange (Cal PX), a state controlled trading floor through which most buying and selling of wholesale electricity took place. New regulations also forced utilities to sell much of the electricity they generated to competitors and buy it back through the Cal PX. Further, most long-term purchase contracts of electricity were outlawed in the Cal PX, and along with them the long-term business planning and price stability that these contracts make possible. New regulations forced most purchases of wholesale electricity into the Cal PX's volatile day-ahead market, in which electricity was purchased for delivery the next day. New regulations also forced purchases into the even more volatile

same-day spot market, where purchases were made by the state created and controlled California Independent System Operator. (Vogel, 2000) and (Wakeland, 2001, pp. 24-29) The law passed in 1996 burdened the electricity market with such a mass of new regulations that only through the most profound ignorance and evasion could one consider it a form of "deregulation."

The lifting of price caps was only one of many changes necessary to deregulate California's electricity market and end its electricity problems (and these were not even lifted on all electricity prices and were not lifted for very long when they were lifted!). California also needed to abolish environmental regulations that restrict the production and transmission of electricity, and end restrictions on who can enter the electricity market. Further, instead of re-instituting price caps once prices began to rise, it needed to extend the abolition of the price caps to all electricity prices across the state. In addition, it never should have created any new regulations during the "deregulation" of its electricity markets in 1996.

By lifting price caps across the state on the wholesale price of electricity but only in San Diego County and southern Orange County on the retail price of electricity, the California government exacerbated its electricity problems. When maximum price controls are imposed, the price is forced below the free-market price. This means that when the price controls are lifted, the price of the product will rise. In the case of the California electricity market, this meant that most distributors had to buy the electricity at high wholesale prices and sell it at retail prices that were kept at artificially low levels. This is why two of the major electricity providers in California, Southern California Edison and Pacific Gas and Electric (PG&E), suffered severe financial losses, with the latter actually declaring bankruptcy. The one major electricity provider that did not suffer as badly, SDG&E, was able to sell electricity for a time at higher prices in the region it serviced, since the retail price caps were temporarily lifted in its region.

The price caps, restrictions on entry into the industry, and environmental regulations and lawsuits reduced the supply of electricity relative to the rapidly growing demand in California. From 1996 until the crisis in 2000, demand rose by 50 percent while supply increased by only 6 percent. (Oliver, 2001) From the late 1980s until the time of the crisis, the generating capacity of California's electricity system actually declined, while at the same time demand soared.[11] The rising price of electricity that occurred in 2000, after the price caps were lifted, merely revealed the fact that a shortage existed; it did not create the problem. The problem was created by the prior existence of the price caps, environmental regulations and lawsuits, and myriad other regulations that have strangled electricity producers.

In fact, the rise in the wholesale and retail prices of electricity, due to the lifting of the price caps, was much higher than it needed to be. This was due to the continued existence of the price caps in the retail market outside of San Diego County and southern Orange County. Customers in the retail market outside these areas—which is most of the retail electricity market in California—could continue to buy electricity at the government imposed, artificially low price. This means they bought more electricity than they would have had the price been free to rise. In turn, this forced distributors of electricity to these customers to purchase more electricity in the wholesale market, since distributors were legally required to provide the electricity demanded by their customers. However, since prices were free to rise in the wholesale market, they were forced up in this market due to the additional purchases. This also, indirectly, pushed prices higher in the retail market in San Diego County and southern Orange County, since SDG&E was free to raise prices in its retail market to compensate for the higher wholesale prices it was paying.

This greater than necessary rise in the price of electricity in the uncontrolled markets occurred due to spillover demand. When maximum price controls are imposed in only part of a market or in only a portion of all markets for a good, demand spills over from the areas that have price controls to the areas that do not have price controls because of the shortages created in the controlled regions. Those who cannot get the good in the controlled regions will attempt to obtain the good from other regions. They will bid up the price of the good in the uncontrolled regions to help fulfill their partially unfulfilled demand at the government imposed, artificially low price. (Reisman, 1996, pp. 247-256) Further, the larger is the controlled market relative to the uncontrolled market, the greater is the spillover demand relative to the uncontrolled market and the larger is the price rise in that market. In this case, the controlled market was extremely large relative to the uncontrolled market.

To solve the problem created by the partial price controls, the California state government should have extended the abolition of the price caps to all markets across the entire state. This would have lessened the rise in the price of electricity since there would have been no spillover demand.

The higher uncontrolled price, along with abolishing environmental and other regulations, would provide the incentive and ability to expand the capacity to produce electricity. A free market in electricity would also provide an incentive for producers to find ways to reduce their costs of production, and thus the prices they charge to electricity users, since this would give them a competitive edge over existing rivals and potential entrants to the industry and help them earn higher profits. All of this would lead to more abundant and more affordable electricity.

Unfortunately, the California state government did not extend the abolition of the price caps. Instead, it re-instituted the rate caps at the retail and wholesale levels. This merely perpetuates the problem. It is like an alcoholic going "off the wagon" because he cannot handle the pain of withdrawal symptoms. He does not reach a state of better health by doing this and, in fact, only further harms his health. In the electricity market, the rate caps are the alcohol. They keep the economy in an unhealthful state. When they are lifted, individuals must experience the temporary pain of withdrawal symptoms in the form of higher prices—caused by the government imposed drinking—before the industry reaches a state of better health, which will consist of a greater supply and lower price of electricity. By re-imposing the rate caps, the government is forcing individuals to drink even more. This will only continue to limit the incentive and ability to produce electricity and make Californians less secure in the existence of this vital good.

As a result of the continued existence of the rate caps, California continues to face the threat of rolling blackouts each summer, when electricity demand is highest. While some power plants have been built since the first rolling blackouts in 2000, it is questionable whether new capacity is being added to the system at a rapid enough rate. Even in some of the years since the first rolling blackouts, the rate of increase in electricity consumption has exceeded the rate at which capacity has been added to the system, especially before the recession of 2008-9.[12] California will experience more problems in the future, especially once the effects of the recession subside, if environmentalists and statists are able to continue to exert their destructive influence.

Environmentalists are especially to blame for California's electricity woes by refusing to allow man to produce the electricity he needs to further his life and happiness—even in the middle of a crisis! This is witnessed in their previously mentioned suit to block the construction of the six new power plants in Southern California. Another example, even more revealing of the destructive nature of environmentalism and its opposition to man's well being, occurred in the summer of 2000. When San Francisco was in the midst of suffering rolling blackouts, PG&E, in a heroic effort to prevent more rolling blackouts, proposed to moor a floating power plant in San Francisco Bay that would be used during power emergencies. Upon hearing this news, environmentalists screamed in protest and even threatened to board and disrupt the operation of the power plant. PG&E eventually gave up on the idea. Even though San Franciscans faced the greater threat of getting stuck in elevators, getting in accidents at traffic intersections due to traffic lights being out of operation, and other dangers and inconveniences, environmentalists cheered at the news that PG&E had given up on the plan. (Baker, 2000) More rolling blackouts eventually did occur in the Bay area. The floating power plant may have been able to prevent these, but that did not matter to environmentalists. The preservation of nature is their goal, not man's safety and well being.

One reason California has not experienced actual blackouts more frequently is due to the decline in electricity demand because of the recession in 2001 and the most recent recession in 2008-9. Another reason is due to the push by the state government to get Californians to reduce electricity consumption during "power emergencies." These are not solutions to the problem. Pushing the environmentalist agenda to conserve electricity during peak demand periods is an inconvenience Californians do not need to tolerate.

If sufficient supply is not added to the system and electricity consumption rises enough, rolling blackouts will be forced on Californians once again by the state government. The solution to California's electricity problems is to abolish environmental and other regulations. One could start doing this by abolishing government regulations inhibiting or preventing the building of more transmission lines and

large-scale power plants. The rest of the nation can avoid the problems California faces by rejecting environmentalist and statist policies and implementing policies that protect the freedom to produce in the electric power industry—and all industries.

There is one last topic that needs to be addressed in connection with the California electricity crisis. It is often claimed that California's electricity problems were caused by power producers and distributors that manipulated supply and prices. However, this is not true. While some power companies, such as Enron, engaged in some dishonest acts, many of the trading tactics criticized by government officials, the media, and the public were legitimate methods used to avoid government controls. In fact, most—if not all—of the schemes that were criticized were made possible by the regulations created during California's "deregulation" of its electricity market. Partial price controls and forcing most trades into the day-ahead and same-day markets create an environment that is ripe for arbitraging and manipulation. The California state government is ultimately to blame for making such schemes possible.[13]

Furthermore, some of the power plants were taken off line during the crisis because they were unprofitable to run at the low, government controlled prices. They were not taken off line to manipulate prices. Power plants were also taken off line, in some cases, to meet pollution limits imposed by environmental regulations. In addition, the lack of transmission lines, due to environmentalists' opposition to building such lines, caused bottlenecking problems. Bottlenecking often prevented excess supply in one area of the state from reaching other areas. The California government—driven by environmentalist and statist ideology—is to blame for California's electricity woes. Electric power producers and distributors of electricity should be commended for doing the best job possible in the face of an onslaught of regulations and other restrictions.

Conclusion to the Economic Effects of Environmental and Other Statist Policies

Environmentalists and statists are making it much more difficult to get the energy we need. They are doing so by restricting oil drilling, preventing the building of refineries, making it harder to refine oil, and imposing taxes on oil companies and on the sale of gasoline. They are also responsible for the establishment of authoritarian governments in many countries with large oil reserves and imposing price controls on oil, gasoline, and electricity in the U.S. They engage in lawsuits to hinder, discourage, and prevent the productive activities of oil companies and electricity producers. They block the construction of power plants, restrict entry into the electric-power industry, block the use of nuclear power and the building of dams, make it harder to use coal, and prevent the building of transmission lines. Energy producers are being suffocated under a mountain of regulations and other legal obstacles based on environmentalist and statist ideology.

Left unrestrained, environmentalism and statism would lead to the complete destruction of our ability to produce energy. This raises a question: Why do environmentalism and statism lead to such destructive results? I will answer this question below. I will also address the issue of what needs to be done to reverse the destructive trends being created by these vicious ideologies. Before I do this, I will discuss three topics environmentalists use to create much confusion on the subject of energy production: "alternative" fuels, pollution, and global warming (now climate change).

"ALTERNATIVE" FUELS, POLLUTION, AND GLOBAL WARMING

A paper that discusses the destructive consequences of environmental regulation on energy production must address claims made by environmentalists on such issues as "alternative" fuels, pollution, and global warming. Environmentalists make a number of claims on these topics that have led to great confusion on the subject of energy production and consumption. The following sections will clear up these confusions.

"Alternative" Fuels and the Limits of Natural Resources

"Alternative" forms of energy, such as solar power, wind power, electric cars, and others, are not the solution to our energy needs. These forms of energy are not economically viable; they are far more

expensive than traditional forms of energy. The reason they are used, to the extent that they are, is because of government regulations that force their use, often through subsidies. However, even with the significant government interference forcing their use, "alternative" forms of energy only account for about five to ten percent of the total energy produced. If we attempted to replace all conventional energy with "alternative" forms of energy, it would radically increase the cost of energy and thus radically reduce our standard of living. It may be that "alternative" forms of energy would be used to a very limited extent without the government violations of rights currently employed to get people to use them; however, they would only be used by people willing to pay the higher prices.

To the extent that these forms of energy are being forced on individuals, such as through The Energy Independence and Security Act of 2007 or legislation in California requiring a certain percentage of automobiles sold to be low-emission vehicles, people are being forced to have a lower standard of living. With regard to the 2007 Energy Act, the federal government is forcing a six-fold increase in the use of ethanol: from 6-billion to 36-billion gallons-per-year. Ethanol is more expensive than conventional fuel and thus lowers the standard of living. With regard to the California legislation, funds have been expended by automobile manufacturers to develop and produce low-emission vehicles when the funds could have been invested more wisely in the production of less expensive vehicles for individuals to purchase. Manufacturers might also use higher prices on standard vehicles to cover some of the extra cost of the low-emission vehicles, which leads to a lower standard of living for the purchasers of the standard vehicles.

To the extent that taxes are used to subsidize the consumption of solar, wind, and other forms of expensive power, taxpayers are forced to pay for more expensive forms of energy. Such an act is doubly destructive to taxpayers: not only are the rights of taxpayers violated when they are forced to subsidize someone else's energy consumption, but they are forced to subsidize the consumption of expensive forms of energy.

At this time, the economically viable forms of energy products are coal, oil, natural gas, hydroelectric power, and nuclear power. It may be that one day in the very distant future we will run out of fossil fuels; however, long before we do, the prices of these products will begin to rise. Production of these products will peak probably decades before they are no longer economically viable. There will most likely be a long, slow decline in the production of these products before they become economically unviable, and any small decrease in the supply of oil and gasoline will cause a large rise in the prices of these products because of their inelastic nature. This will provide a strong signal well in advance for individuals to begin conserving on their consumption of these products and turn to different sources of energy. Further, producers will have an incentive to find alternative sources of these products or work existing sources more intensively to obtain every last bit of these resources. Finally, as the cost of obtaining fossil fuels rises, it will provide a strong incentive for energy producers to develop and produce other forms of energy.

Let me emphasize that the day we run out of fossil fuels is not coming as soon as many people think.[14] People have been predicting we will run out of oil since the early days of the industry, just shortly after the first oil well was drilled in the U.S. in Pennsylvania in 1859.[15] They continue to make such claims today. (Watkins, 2006, p. 508) However, the facts belie these predictions. Predictions based on "peak oil theory" have been proven to be grossly inaccurate over and over again. The most interesting question the theory raises is not when oil production will peak, but why forecasters merely generate new forecasts, using virtually the same models that have proven to be grossly inaccurate in the past, without explaining the cause of the previous errors. (Lynch, 2002, p. 387 and 2009)

Looking at the facts, we can see the years-of-reserves of oil available have continued to increase despite the dramatically increased consumption of oil around the globe. The years-of-reserves for coal, natural gas, and nuclear energy also continue to grow. The years-of-reserves is the estimate of how long *known* reserves will last if consumption continues at its current rate. The years-of-reserves do not even take into account the endless supply of hydroelectric power available. (Lomborg, 2001, pp. 122-129) As long as men are free to apply reason to the task of production, oil companies will continue to find more deposits of oil and will continue to improve their ability to extract more oil out of any given deposit.

More importantly, we are not running out of natural resources. The earth is a solid ball of chemical compounds and elements, from its molten core to the tip of its gaseous atmosphere. We have barely begun to scratch the surface to gain access to the resources contained within the earth. This is seen in the fact that the deepest mines go only about one or two miles down and the deepest oil wells go nearly seven miles down; however, it is almost *four-thousand miles* from the surface of the earth to its core. If one considers the sheer physical volume of resources contained within the earth—about 260-billion cubic-miles—then one can begin to understand that we may not run out of fossil fuels and other raw materials for *many centuries* to come based on the small fraction of the earth we have tapped into at this time. One economist, George Reisman, has even made some back-of-the-envelope calculations to show that we may not run out of raw materials for *millions of years*. (Reisman, 2006)

George Reisman also shows that we are not running out of energy either. He states:

> More energy is discharged in a single thunderstorm than mankind produces in an entire year…Heat from the sun provides a constantly renewed supply that is billions of times greater than the energy consumed by man…From a strictly physical-chemical point of view, natural resources are one and the same with the supply of matter and energy that exists in the world and, indeed, in the universe. Technically, this supply may be described as finite, but for all practical purposes it is infinite. It does not constitute the slightest obstacle to economic activity. (Reisman, 1996, p. 63)

The supply of *economically useable* natural resources—the supply of natural resources man has acquired the knowledge of how to use and to which he can gain access—has increased throughout the Industrial Revolution and continues to increase to this day. Prior to the Industrial Revolution, man could gain access to only a very limited amount of natural resources at the surface of the earth, with a pick and a shovel. Today, he can gain access to far more resources through the use of explosives, earth-moving equipment, sonar, and other forms of advanced technology. The application of man's reason to production has radically increased the supply of economically useable natural resources.

Thanks to economic and technological progress, and the acquisition of knowledge on which both depend, we know how to employ far more natural resources to benefit man and can gain access to far more than we ever could before. These natural resources no longer lie dormant in the earth, useless to man. They are now used to further man's life and happiness. For instance, much iron ore no longer lies in the ground in the Mesabi Iron Range in Minnesota, but exists in the form of buildings and bridges that are of benefit to man. Much oil and natural gas no longer lie far beneath the earth's surface, but help keep men warm in the winter, provide electricity, and help them move themselves and their property around the globe. If man is free to continue to apply his reason to production, he will be able to continue to expand his knowledge of and command over nature and thus continue to expand the supply of economically useable natural resources.

The problem of producing more energy is not one of a lack of natural resources; it is a manmade problem. The problem is the restriction of man's freedom imposed by environmentalists and statists. If man's freedom to produce is protected, he will be able to produce the energy—and the many other products—he needs to survive.[16]

The alleged desire by environmentalists for "alternative" fuels is a red herring. Environmentalists do not want man to use "alternative" fuels any more than they want him to use conventional fuels. This is best seen in the fact that environmentalists vehemently oppose the use of the one form of conventional energy that produces no pollution and whose source is constantly replenished: hydroelectric power. If reducing pollution and providing sources of energy that we will not run out of are actually goals of environmentalists, why don't they support the use of this conventional fuel?

Moreover, imagine if any "alternative" forms of energy ever become economically viable. Imagine, say, windmills covering the landscape or solar energy panels covering the desert. Imagine garbage dumps filling up with the spent batteries that were used to power electric cars. Environmentalists would attack the use of these forms of energy probably even more viciously than they have attacked the current forms

of energy. Indeed, they already engage in such attacks. For instance, they are complaining that man is using too much solar energy! (Leung, 2007)

As another indication, environmentalists have generally been more favorable toward the use of natural gas, relative to other fossil fuels (especially coal), because it creates less pollution. However, due to recent technological advancements, they have begun to attack the use of natural gas because the advancements stand to radically increase the ability to produce natural gas and lower the cost of producing it. Environmentalists did not mind the use of natural gas when it was used in a more limited fashion. Now the prospects of inexpensive natural gas and the use of much larger quantities of it have caused them to turn against this form of energy. (Hayward, 2011)

Environmentalists attack the use of conventional fuels and support "alternative" fuels as a means of preventing the use of the conventional fuels, not as a means of promoting the use of the "alternative" fuels. In the end, they want man to use no fuels. They want this because the ideas on which environmentalism is based are anti-production and anti-man. I will discuss those ideas in detail below.

Pollution

It is often claimed that we need environmental regulations to reduce the amount of pollution that exists. Without such regulation, it is claimed that the levels of pollution produced by, for instance, coal-fired power plants would be harmful to human beings. While harmful levels of pollution are a legitimate concern, environmentalists are not concerned about the effects of such pollution on man. If they were they would be advocates of capitalism. The rising standard of living under capitalism is what makes it possible for people to produce and afford products that reduce the levels of harmful pollution. For example, technological advancement achieved through economic progress under capitalism has made possible the building of automobiles that emit less particulate matter. Without the ability to produce these products, all the environmental legislation in the world will not bring them into existence. The difference in productive capabilities explains why there is more air pollution in large cities in poor countries (such as Mexico and India) than in rich countries (such as the United States). If you are starving because you cannot produce enough food to eat, reductions in pollution will be of no help to you. Once an economic system has achieved a certain productive capability, and thus people are able to satisfy their most urgent needs and wants, they can afford to focus on improving their lives by reducing the levels of harmful pollution.

In fact, capitalism and industrialization have actually reduced the level of pollution in which people must live. Evidence of this fact is seen in air pollution data collected in London, the city for which data exist for the longest period of time. These data show that air pollution peaked in the late nineteenth century in London and that the air is cleaner in London today than it was long before industrialization began to take place. Data also show that environmental regulation has had, at best, only a marginal positive effect on the ability to reduce air pollution. (Lomborg, 2001, pp. 164-165 and 170) When the increased costs of environmental regulation are taken into account, the overall effect is that it will make it harder to reduce pollution because it undermines the productive capability and standard of living. This makes it harder to produce, and thus harder for people to afford, products that reduce harmful levels of pollution.

The way to solve any legitimate problems concerning pollution is to establish and protect private property rights. For example, if one man pollutes another man's property, the latter can seek redress in a court of law for this violation of his property rights. The property owner can get a court to order the offender to cease the polluting and clean up the property. Any legitimate problems concerning air pollution could be solved in a similar manner. In these cases, the plaintiff must show objective proof that demonstrable physical harm was caused.

The protection of property rights is exactly what is needed with respect to the 2010 oil spill in the Gulf of Mexico. The responsible companies should be held accountable (if they have not been already) for the harm done to property owners along the gulf and those who earn their livelihood fishing in the area and who were temporarily unable to do so due to the spill. The solution to the gulf oil spill is *not* to stop or scale back offshore drilling. While it may be appropriate to require oil companies to better assure that their operations in the gulf will not lead to a similar spill, drilling must continue (both at existing

wells and new wells to be drilled in the future). Putting a stop to offshore drilling would violate the rights of those drilling for oil in the gulf and would push up the prices of oil and gasoline higher than they already are.

The case of MTBE is also relevant to this issue. One of the reasons given by state governments for banning MTBE was that it leaked from gasoline stations' underground tanks and contaminated water supplies. The solution to the problem in this type of case is not to institute statewide or nationwide bans on the use of MTBE or punish gasoline producers (since they were not responsible for the leaks and were effectively forced by the government to use MTBE in the first place), but to require the offending station owners or producers of defective tanks to stop the leaks and clean up the contamination.

More generally, the solution to harmful pollution is *not* to throttle industrial civilization. Industrialization is key to improving the well being of man. Industrialization has raised the standard of living of human beings in the Western World since it began well over 200 years ago in Great Britain and could do the same for the rest of the world as well. Undermining or destroying industrial civilization would radically lower our standard of living and *increase* the level of pollution we are exposed to. (Rand, 1971, pp. 86-89 and 127-151) and (Simpson, 2005, pp. 88-90 and 139-142)

One must also remember that some "pollution" is beneficial. For example, it is beneficial to use some land for garbage dumps and some areas of the earth to dispose of human waste. The key with respect to waste is to be able to remove it from where we live and, if necessary, chemically alter it to make it less harmful. Through the development of modern sewage systems and transportation systems under capitalism, we are able to remove the waste from where we live, chemically alter it, and therefore live in a much less polluted environment.

As with "alternative" energy, environmentalists use "pollution" merely as a means to attack industrial civilization. They do not care about the issues discussed above because they are not concerned with the well being of man. Just what they are concerned with will be discussed below.

Global Warming

Environmentalists have reached a feverish pitch on the issue of global warming. They are desperately trying to create a state of fear and hysteria to get government controls enacted. They say if we do not reduce our consumption of fossil fuels, the resulting creation of CO_2 and increased atmospheric temperature are assured to cause worldwide disasters. According to one news outlet, "A leading U.S. climate researcher says the world has a 10-year window of opportunity to take decisive action on global warming and avert catastrophe." Apparently there are only five years left to avoid disaster (at the time this was written in 2011) since that claim was made in 2006. It is also claimed that disease rates will rise worldwide and that mass extinctions will occur. According to a British report, global warming could cause a level of devastation similar to that caused by the world wars and the Great Depression. Former British Prime Minister Tony Blair said the report "has demolished the last remaining argument for inaction in the face of climate change." And here is the type of action that world leaders are proposing: according to an Associated Press report, forty-six nations, led by France, have called for "a new environmental body to slow global warming and protect the planet, a body that potentially could have policing powers to punish violators." (MSNBC, 2004, 2006a, 2006b, and 2006c) and (Anonymous, 2007b)

One thing that must be established from the outset in any discussion of alleged negative by-products of energy production and an industrialized society is the enormous benefit of these things to human life. Environmentalists systematically ignore or evade this fact. Even worse, they denounce industrial civilization. Even if their worst-case scenario comes true, the negative consequences pale in comparison to the life-promoting value of industrialization. Further, any solutions to the alleged problem of global warming must not violate the freedom on which energy production and industrialization depend. In this context, let us take a look at the claims of environmentalists on the subject of global warming.

Environmentalists scream of impending doom and ignore or evade—or worse yet, try to suppress—the significant opposition to their claims concerning global warming. Adherents of manmade global warming routinely try to equate the denial of claims related to manmade global warming with denial of

the Holocaust. They have also called for criminal trials against their opponents. Further, they have called for the de-certification, by scientific organizations, of those scientists who refute claims about manmade global warming. They have also used their positions of power in the government to bully their opponents to get them to abandon their positions on global warming and get them to stop funding research that refutes claims regarding manmade global warming.[17] These represent blatant attempts to intimidate and silence those who dispute environmentalists' claims on the subject of global warming.

The comparison to "Holocaust deniers," as well as routine references to their opponents as "flat earthers," provide excellent examples of the intellectually corrupt nature of environmentalists. When one claims that we can be as certain about something as enormously complex and difficult to predict as the weather (100 years into the future no less!) as we are about an event that took place in modern history or a fact that can be verified simply by opening one's eyes (thanks to space travel), one does not have as one's goal the attempt to characterize the true nature of the global warming debate. The use of such grossly inaccurate analogies can only have one motive: to ridicule one's opponents in order to avoid having to answer their arguments. Such tactics are typically used as a desperate measure when one knows that one cannot refute the claims of one's opponents and yet one still refuses to abandon one's own false beliefs. In such a situation, the only way for one to believe that one's arguments are still "valid" (and attempt to get others to believe so) is for one to ridicule, ignore, and evade the arguments of one's opponents.

As a part of this intellectual dishonesty, environmentalists ignore or evade the many papers and books written by prominent scientists showing the contradictions, errors, and uncertainty in their claims on global warming.[18] They ignore or evade the fact that *more than 31,000 scientists* have signed a petition that declares, in part:

> There is no convincing scientific evidence that human release of carbon dioxide, methane, or other greenhouse gasses is causing or will, in the foreseeable future, cause catastrophic heating of the Earth's atmosphere and disruption of the Earth's climate. Moreover, there is substantial scientific evidence that increases in atmospheric carbon dioxide produce many beneficial effects upon the natural plant and animal environments of the Earth.[19]

Let us now take a brief look at the facts environmentalists are ignoring and evading in connection with global warming. I am not going to present a detailed case against the claims made by environmentalists because I have done that elsewhere. (Simpson, 2005, pp. 148-151)

First, the computer models of the earth's atmosphere used to predict the warming that is to occur are notoriously inaccurate and have magnitudes of uncertainty that dwarf the alleged effects from manmade CO_2. Further, historical data show a warming trend in the last century but they also show that probably as much warming occurred during the first half of the twentieth century as during the last half and that a global cooling trend existed from the 1940s to the 1970s (which explains why environmentalists are shifting from global warming to "climate change," so they do not have to be concerned about the direction of the change in the weather). If one contrasts this with the fact that far more CO_2 was generated by man during the last half century than during the previous half century, serious doubts are raised about whether more CO_2 is causing the warming. It is more likely that changes in solar activity are causing the warming since they are better correlated with changes in the temperature of the earth's atmosphere. Finally, the temperature of the earth's atmosphere has fluctuated throughout its history and although it is believed to be high today it is not believed to be as high as at other times during the earth's history, long before the existence of man. So the evidence does not substantiate the claims made by environmentalists about global warming: other factors are probably more important, the computer models are not reliable, and historical data raise doubts about environmentalists' claims. It is more likely that the atmospheric temperature fluctuations are natural.

Environmentalists also ignore or evade the potential benefits of global warming and the increase in CO_2 that is allegedly bringing it about. For instance, evidence shows that past ice ages have had devastating effects on living beings and that the earth is overdue for another one. Surprisingly, some of

these ice ages appear to have occurred during periods when CO_2 concentrations were much higher than they are now. (Broad, 2006) This belies the notion that the CO_2 levels created by man are causing the warming experienced in the twentieth century. Nonetheless, if any atmospheric warming is being caused by man it could postpone or eliminate the next ice age. Further, additional CO_2 makes it easier for plants to grow, which could dramatically reduce the cost of growing food and improve people's ability to feed themselves. Finally, evidence shows that CO_2 levels have fallen dramatically from early in the earth's history. If they continue to fall, plant life—and therefore animal life—will be impossible. So the creation of CO_2 by man could save the human race!

If atmospheric warming does come, whether caused by man or nature itself, the rational response would be to protect man's freedom to take the necessary actions to deal with it. For instance, he will need the freedom to build better housing, air conditioning systems, and, perhaps, coastal flood control systems. Freedom is what man requires under any conditions to further his life and well being.

The proposed solution favored by environmentalists, to forcibly impose a radical reduction in our use of fossil fuels—to throttle industrial civilization—will radically reduce our ability to produce the energy we need, lower the standard of living of man, and prevent him from not only dealing with any *potential* harmful side effects of global warming, but prevent him from dealing with *already existing* threats created by nature, such as earthquakes, hurricanes, snowstorms, floods, etc. It will also prevent him from providing the basics he needs to survive, such as growing food, providing clean drinking water, protecting himself from the elements, and so on.

The international body mentioned previously, and proposed by many world leaders, to police CO_2 emissions by nations is particularly ominous. If implemented, it would be the beginning of an international police state, punish people for attempting to raise their productive capabilities and standards of living, and create a basis for conflict and war between countries. (Reisman, 2007) The key to man's survival is not to enslave him to the arbitrary dictates of governments or international bodies controlled by environmentalists or anyone else, but to protect his freedom so he can produce the values his life requires.

Why is it that environmentalists ignore so many relevant facts and make such flawed arguments? They do so because they are not concerned with evidence or discovering truth. They are concerned only about furthering their destructive cause. As stated by one intellectual leader of the movement, Stephen Schneider, a professor in the department of biological sciences at Stanford University:

> [W]e need to get some broad-based support. . . . So we have to offer up scary scenarios . . . and make little mention of any doubts we might have. This 'double ethical bind' we frequently find ourselves in cannot be solved by any formula. Each of us has to decide what the right balance is between being effective and being honest.[20]

Another prominent intellectual leader of the environmentalist movement, Paul Ehrlich, also from Stanford University, stated in connection with the process of verifying species extinction, "biologists don't need to know how many species there are, how they are related to one another, or how many disappear annually to recognize that Earth's biota is entering a gigantic spasm of extinction." (Ehrlich & Ehrlich, 1996, p. 113) Both of these statements represent blatant rejections of the need for objective evidence to prove what one is claiming. They endorse dishonesty and arbitrary assertions. Further, these statements cannot be ignored as the ravings of fringe members of the environmentalist movement. They were made by well-known leaders of the movement that teach at a prestigious university.

About thirty years ago, environmentalists were predicting a global climate catastrophe, except then they were not warning people of the impending doom of global warming, they were warning of the impending doom of global *cooling*. They warned of drastic declines in food production that would take place and urged governments to take action. (Gwynne, 1975) Environmentalists have repeatedly made predictions of wide-spread famine, the depletion of natural resources, and other catastrophic events that have not come true. Based on this, one might think environmentalists are a case of the little boy who cried wolf. But this is mistaken. As stated by George Reisman, "They are a case of the *wolf* crying again and again about alleged dangers to the little boy. The only real danger is to listen to the wolf." (Reisman,

1996, p. 87) (Emphasis in original.)

What makes environmentalism so dangerous? That is the topic of the next section.

Conclusion to "Alternative" Fuels, Pollution, and Global Warming

As one can see, the claims that environmentalists make on the topics of "alternative" fuels, pollution, and global warming are not valid. However, the problem with the environmentalists' claims is much deeper than that they are invalid. When an intellectual leader of a movement acknowledges that dishonesty is an acceptable means to get people to join one's cause, and no opposition is voiced within the movement to such an approach, one has witnessed a clear sign of the intellectual bankruptcy of the movement. The intellectually corrupt nature of the environmentalist movement will become even clearer in the next section. Because of their intellectual corruption, the claims of environmentalists in connection with global warming, pollution, the depletion of natural resources, and anything else (including the need for "sustainability," which is really just an attempt to make environmentalism sound more palatable) should be dismissed without consideration until they decide to base their claims on objective evidence and honest methods. No statement they make should be given any weight whatsoever unless it is verified by reputable sources.

A PHILOSOPHICAL ANALYSIS OF ENVIRONMENTALISM AND STATISM

The Destructive Nature of Environmentalism

Since man is a conceptual being, to understand the nature of environmentalism—or any ideological movement—one must look at the fundamental ideas driving the movement. Understanding the ideas at the root of a movement is important because the fundamental ideas are the ones that determine what policies and actions are consistent with the movement.[21]

Environmentalism is a movement based on the idea that nature has intrinsic value—value in and of itself. Based on this idea, environmentalists want to sacrifice man to snail darters, spotted owls, and inanimate matter such as rivers and lakes. They want to sacrifice man to everything in nature that is non-man. This is something that is explicitly stated by environmentalists. For instance, David M. Graber, a research biologist at the National Park Service, stated he is "…not interested in the utility of a particular species, or free-flowing river, or ecosystem, to mankind. *They have intrinsic value*, more value—to me—than another human body, or a billion of them. Human happiness, and certainly human fecundity, are not as important as a wild and healthy planet." (Graber, 1989, p.1) (Emphasis added.)

In fact, *nature has no intrinsic value*. Nature derives its value from man's ability to use nature to further his life and happiness. For example, a tree does not have value to man by the mere fact of its existence. It has value because one can cut it down and use the wood to build shelter to protect oneself from the elements or because one can pick fruit from the tree and eat it. The tree has value to man because of its beneficial relationship to man.

Based on the belief that nature has intrinsic value, it is believed that, as Mr. Graber states, a free-flowing river has value simply because it exists as a free-flowing river. Therefore, when man dams the river to provide electricity, drinking water, flood control, and recreation areas for himself, he is seen as destroying the good. Despite the fact that damming the river benefits man enormously, the environmentalists would rather sacrifice man to nature so that the river can remain in its natural state. The same is true, for instance, with drilling for oil in northern Alaska. Man is not to alter this frozen wasteland even though the oil will raise his standard of living.

Environmentalists oppose energy production—and the production of everything else—as an end in itself; they oppose it to sacrifice man to nature. This is seen in the quote above by Mr. Graber, in which he professes his desire to sacrifice a billion people for the sake of having a wild planet. In addition, Adam Kolton of the Alaska Wilderness League stated, "Drilling the wildest place in America is objectionable *no matter how it's packaged*." (Alaska Wilderness League, 2001) (Emphasis added.) It does not matter to Mr. Kolton what benefits humans might derive from Alaskan oil.

Or, as environmental author Michael Ableman put it, "The assumption that by buying anything,

whether green or not, we're solving the problem [of man's allegedly harmful effect on 'the environment'] is a misperception. Consuming is a significant part of the problem…" Mr. Ableman's comment shows that even buying "green" products does not go far enough. People who do this are considered to be "light greens." Being a consistent environmentalist requires "sacrifice" and "self-abnegation." "Green consumerism," states Paul Hawken, an author and longtime environmental activist, "is an oxymoronic phrase."[22] Consumption of the products of an industrialized society—any of them—is antithetical to environmentalism.

But an attack on industrial civilization is an attack on human life. Billions of people's lives depend on industrial civilization. They depend on it, for example, for the life saving medicines that are produced by the application of science to production. The application of reason and science to production is the essence of industrial civilization. The application of these fundamental values to production has made possible the abundance of food, clothing, shelter, electricity, sanitation systems, transportation systems, and myriad other products on which people's lives depend.

The sacrifice of man to nature is the logical and consistent result of the belief that nature has intrinsic value. If one believes in the intrinsic value of nature—and takes it seriously—then when man drills for oil, dams a river, strip mines for coal, or in any other way alters the natural surroundings to further his own life and happiness, one will believe that man is destroying the good and is therefore evil. According to these ideas, man is a plague on the earth and must be destroyed.

The more consistent environmentalists understand this. As Mr. Graber states:

> I know social scientists who remind me that people are part of nature, but it isn't true. Somewhere along the line—at about a billion years ago, maybe half that—we quit the contract and became a cancer. We have become a plague upon ourselves and upon the Earth…Until such time as Homo sapiens should decide to rejoin nature, some of us can only hope for the right virus to come along." (Graber, 1989, p. 1)

It is irrelevant that most of the people who call themselves environmentalists do not believe in mass murder. What matters is that the wholesale slaughter of human life is consistent with environmentalism. The environmentalists who do not believe in mass slaughter simply do not know or do not care about the nature of the ideas they support; they do not know or care about the goals of those people who take environmentalist ideas seriously and act on them consistently. Ultimately, the inconsistent members of the movement (the "light greens") will only serve to help achieve the ends of the consistent members of the movement. As stated by Ayn Rand:

> When two men (or groups) hold the same basic principles, yet oppose each other on a given issue, it means that at least one of them is inconsistent. Since basic principles determine the ultimate goal of any long-range process of action, the person who holds a clearer, more consistent view of the end to be achieved, will be more consistently right in his choice of means; and the contradictions of his opponent will work to his advantage…(Rand, 1967, pp. 145-147)

The wish for death on a massive scale is no accident. It is the logically consistent outcome of environmentalist ideas. And if Graber's statements are not vicious enough and do not call for enough destruction, consider what Eric Pianka, a professor of zoology at the University of Texas at Austin, said in a speech he made in 2006. In this speech, Pianka stated that humans are no better than bacteria. He advocated the use of airborne Ebola to eliminate ninety percent of the world's human population. He advocates the use of this virus because it is highly lethal and it kills in only a matter of days. This is a virus that causes a slow and tortuous death, in which the internal organs eventually liquefy. (Mims III, 2006)

Environmentalists have also put their ideas into action. Members of the Earth Liberation Front routinely torch businesses, residences, and other property in the name of "saving the planet." Members of

Earth First! engaged in the deadly practice of spiking trees to stop logging in the Pacific Northwest. The Unabomber sent mail bombs to businessmen and other individuals because he opposed industrialization and technology based on environmentalist ideas.

Some readers might think that I am focusing only on the "extreme" members of the environmentalist movement and that the views of the people above do not represent the views of environmentalists in general. However, one never hears fellow environmentalists fundamentally criticizing individuals for advocating the destruction of human life on a massive scale. In fact, they are more likely to give them enthusiastic applause and awards instead. For instance, the speech by Pianka was made at a Texas Academy of Science annual meeting, at the end of which he was given a standing ovation by a few hundred fellow members of the academy. This was the reaction of his colleagues to his speech in which he advocated the extermination of billions of people. Later, at the same meeting, Pianka received more applause from a banquet hall filled with about four-hundred people when he was given a plaque naming him the academy's 2006 Distinguished Texas Scientist. This obviously does not represent the views of just a few fringe members of the movement.

While environmentalists have not *yet* been able to realize their desire to slaughter most of the human race, they are still responsible for much hardship, destruction, and even massive numbers of deaths. For instance, they are responsible for the deaths of millions of people each year because of their opposition to the use of the insecticide DDT, which enabled man to control and eliminate insect borne diseases. (Jukes, 1992) and (Anonymous, 2002) They are also responsible for a lower standard of living in the form of higher oil, gasoline, housing, electricity, and automobile prices, as well as a whole host of other prices. I have already discussed why oil, gasoline and electricity prices are higher. Housing prices are higher due to restrictions on logging, which raises the price of lumber to build homes, and on the use of land for building, which raises the price of land. Automobile prices are higher because manufacturers have been forced to design, develop, and produce automobiles that get higher gas mileage and have lower emissions. For example, President Obama revealed plans in 2011 to force automobile manufacturers to achieve an average gas mileage of 54.5 miles-per-gallon (mpg) for light trucks and cars by the 2025 model year. (Migliore, 2011) This is a drastic increase from the 35 mpg by 2020 required by the Energy Independence and Security Act of 2007 and the 25 mpg that exists today. Automobile prices will rise along with the mileage. It will also cause automobile safety to decline as manufacturers reduce the size and weight of their vehicles to meet the new standards.

We have only seen the beginning of the destructive effects of environmentalism in Western culture. If these vicious ideas continue to be integrated into our culture, they will lead to the destruction of human life on a scale that is unimaginable.

The Destructive Nature of Statism

Ayn Rand said statism "holds that man's life and work belong to the state—to society, to the group, the gang, the race, the nation—and that the state may dispose of him in any way it pleases…" (Rand, 1989), p. 4-5) Statism exists in many forms, including theocracy, communism, Nazism, fascism, socialism, and the welfare state or mixed economy. Environmentalism can also serve as the basis for a statist government. Statism is destructive to human life because it is inconsistent with the requirements of human life. This is why statism, in its most consistent forms, leads to death and destruction on a massive scale, as it has in communist and socialist countries such as North Korea and the former Soviet Union.

Man survives by reason. He must use his mind to think and produce the values his life requires. For instance, to grow a field of wheat, he must learn what time of year it is best to plant the crop, how much to water the crop, how much fertilizer to use, and what type of climate and soil are best in which to grow wheat. More fundamentally, he must recognize that water is necessary to grow wheat and that some substances actually improve the wheat's ability to grow and can thus be used as fertilizer. In addition, he must learn how to protect his wheat from disease and pests, he must develop methods of irrigation, and he must learn about the principles of science and engineering and apply them to building machines (such as combines and fertilizer spreaders) that aid him in planting, growing, harvesting, and transporting the wheat. Of course, there are many more things man must use his reason to learn in order to grow an

adequate supply of wheat.

If it appears complicated enough to acquire the necessary knowledge just to grow a field of wheat, imagine the enormous amount of thought and effort required to produce the myriad products necessary for human survival (including energy). For each individual man to be able to use his reason, freedom (i.e., the absence of the initiation of physical force, of compulsion and coercion) is required. Man needs the freedom to study and learn about all the principles of agriculture, physics, and engineering mentioned above and in every other field of human endeavor. He also needs the freedom to apply the knowledge he gains to produce the things he needs to survive. Finally, he needs the freedom to use what he produces for his own benefit.

Statism prevents all this. It prevents all this, for instance, through the regulations and authoritarian governments that are thwarting our ability to produce energy. For example, it prevents the necessary thinking and acting through the imposition of price controls on oil, gasoline, and electricity production. Price controls forcibly prevent sellers of these products from setting the price they think is appropriate. They thus prevent buyers from obtaining products for which they are willing to pay and sellers from expanding the production of goods appropriately. In addition, so-called wind-fall profits taxes expropriate funds that rightfully belong to producers and prevent them from using the funds to produce greater amounts of wealth or pay owners a dividend. Subsidies on "alternative" energy force taxpayers to pay for products that they show with their own voluntary purchases in the marketplace they do not want to purchase. The subsidies also decrease the funds available to produce products that people do want to purchase. Authoritarian governments expropriate property from producers and attempt to prevent production from being disciplined by the profit motive and price system. They substitute the gun of the dictator for the discipline of the marketplace.

One can see here that statism sacrifices individuals by forcibly preventing them from using their minds to further their own lives. All brands of statism have the sacrifice of the individual in common, whether it is theocracy (as in Middle Eastern countries today), the welfare state or mixed economy (as in the U.S.), socialism, or environmental statism. Statism is a political expression of the morality of self-sacrifice. This morality says that it is a moral virtue for individuals to sacrifice themselves, whether to other people, nature, an alleged God, etc. A statist government provides a specific outlet to which the individual is forcibly sacrificed. Under theocracy the individual is sacrificed to an alleged God, under socialism and the welfare state or mixed economy the individual is sacrificed to "society" or the "public good" (i.e., other men, albeit to a lesser degree under the latter two), and under environmental statism the individual is sacrificed to animals, plants, rocks, and dirt. Despite their differences, the end result is the same: human life is destroyed.

The Relationship Between Environmentalism and Statism

Environmentalism and statism are not ideological equals. Environmentalism is more fundamental than statism. Statism is a more general and abstract concept that focuses on politics; it subsumes all forms of collectivist politics. Environmentalism focuses primarily on a theory of value. This theory of value, as discussed above, leads logically to a code of morality that says men should sacrifice themselves to preserve the natural environment. It also provides the moral justification for a statist government to achieve this goal.

Since the collapse of the Soviet Union, the world has explicitly seen the failure of socialism and has, to a significant extent, abandoned socialist forms of statism. However, the moral belief that it is good for individuals to sacrifice themselves remains. The result in the West has been that socialist statists have been largely replaced by environmental statists.

In terms of potential destructiveness toward energy production, environmentalism represents a much greater threat than statism. By upholding the intrinsic value of nature, environmentalism explicitly attacks all forms of production, including the production of energy. Environmentalism requires that man stop all production to preserve nature. Statism qua statism does not call for the end of all production. Milder forms of statism, such as the welfare state, merely regulate the production of wealth to achieve the goals of statists (such as redistributing income). Even socialists upheld at one time that their political/economic

system would be more productive than any other system. Nevertheless, socialism is antithetical to production for the reasons I have discussed throughout this paper that statism destroys the productive capability. In essence, non-environmental statists want to enslave and destroy you but sometimes encourage the production of wealth to achieve their goals. Environmentalists want to prevent you from altering nature and thus seek to enslave you, prevent you from producing, and even kill you in order to achieve this goal.

Overall, environmentalism is a greater threat to human life. It is the worse of two evils. It would lead to the most brutal statist type of government possible, and therefore greater destruction than other statist forms of government, because of its more fundamental attack on the requirements of human life.

CONCLUSION

Environmentalist and statist ideology are wreaking havoc on the energy industry because of their destructive natures. They are based on the anti-human ideas of collectivism and sacrifice. They require the use of force to achieve their goals. If implemented consistently, they would lead to death and destruction on a massive scale. This has already occurred under some of the more virulent forms of statist governments that have been implemented throughout the world in the twentieth century, such as in communist North Korea, China, Cuba, and the former Soviet Union (among others), where as many as one-hundred million people have been killed in pursuit of socialist ideals. (Courtois, Werth, Panné, Paczkowski, Bartosek, & Margolin, 1999, p. 4) The sacrifice required by socialism is probably best seen in the socialist slogan "from each according to his ability to each according to his need," which condemns those of productive ability to be sacrificed to those in need and makes everyone needy as a result. So the sacrifice of one-hundred million people under socialism is no accident. It is a logical outcome of the ideas on which socialism is based.

Environmentalists, not happy with sacrificing some men to other men, call for the sacrifice of mankind to nature. Fortunately, a government consistently based on environmentalism has not yet been created. The destruction that would be caused by such a government would make the communists and socialists look like friends of humanity.

In order to enable the energy industry—and every other industry—to flourish, governments based on the right ideas must be established. Governments that protect individual freedom are needed. If freedom is protected, men will be able to do the necessary thinking and acting to produce more and better energy products. Freedom is protected through the application of the principle of individual rights. Individual rights define and sanction what a man is free to do when living in a society of men. Capitalism is the political and economic system that protects individual rights and, therefore, freedom. Capitalism is the only political/economic system consistent with what men must do to further their lives and happiness; it is the only system that protects man's freedom to use his reason—his tool for thinking conceptually—to understand and succeed in the world, including succeeding at producing energy.

The morality of rational egoism (that is, the morality of rational self-interest) gives rise to and supports the principle of individual rights. This morality says that each man has a moral right to his own life and should live it to pursue his own happiness. It condemns as evil sacrificing oneself to others or sacrificing others to oneself, including the sacrifice of men to animals, plants, and inanimate matter. It recognizes that the effort that individuals put forth to produce wealth, such as energy products, is one of the highest moral virtues because of the importance of wealth to furthering human life. If rational egoism and capitalism are accepted on a wide scale, not only will it lead to an abundance of energy products, it will lead to the greatest flourishing of human life that the world has ever known.[23]

ENDNOTES

Title: This article is a much longer and more detailed version of another article written by the author (Simpson, 2008-2009). The section on oil and gasoline production is based on yet another article written by the author (Simpson, 2011). I thank Alex Epstein, Annaliese Cassarino, Craig Biddle, and

Jim Brown for helpful comments on earlier versions of this article. All the opinions expressed in this article are, of course, my own.

1. On U.S. refinery capacity and for examples of regulations see the following articles from *Oil & Gas Journal*: (Nakamura, 2003), (Snow, 2005, 2006a, and 2006b) and (Anonymous, 2005). For more examples of regulations see (Glain & Howe, 2004). For examples of lawsuits by the EPA see (Temple, 2005).
2. See (Anonymous, 2005), (Nakamura, 2003), and (U.S. Energy Information Administration [USEIA], 2011).
3. See (Reisman, 1996, pp. 191-192) for more on the nature of speculation.
4. For the current price of gasoline, see (American Automobile Association, 2011). The price I quote is from October 7, 2011. On how prices of manufactured goods are determined by their costs of production, see (Reisman, 1996, pp. 172-173 and 411-417).
5. On why welfare is inappropriate, see (Bernstein, 2001). On the proper functions of government, see (Simpson, 2005, pp. 5-10 and 205-209).
6. See (Simpson, 2005, pp. 171-177) for more on this subject.
7. These figures are based on data obtained from the USEIA at http://www.eia.gov/countries/data.cfm. For net imports, the United Kingdom showed the second largest increase in net imports from 2000 to 2010. However, the UK shifted from being a net exporter of about 800,000 b/d in 2000 to a net importer of about 230,000 b/d in 2010, so its change was not purely made up of an increase in imports.
8. 8. On Chernobyl, see (NucNet, 2006) and (Peterson, 2000). On the nature of communism and socialism, see (Simpson, 2005, pp. 21-23).
9. On what prevents and leads to greater safety and quality in products and services, see (Simpson, 2005, pp. 101-116).
10. On the proposed new transmission line, known as the Sunrise Powerlink, see (Lifsher, 2008), (Jones, 2007), and (SDG&E, 2010a and 2010b).
11. California electricity production capacity data were obtained from the State Electricity Profiles of the USEIA at http://www.eia.doe.gov/cneaf/electricity/st_profiles/backissues.html. Electricity consumption data were obtained from the CEC.
12. Data for electricity consumption in California were obtained from the CEC. Data on California's electricity production capacity were obtained from (USEIA, 2009).
13. For a detailed discussion of some of the trading tactics made possible by California's "deregulation" of its electricity market, see (Wakeland, 2002).
14. For one estimate, see (Jaccard, 2005, pp. 148-150).
15. For examples, see quotes provided in (Deming, 2003, pp. 1-2) and (Cambridge Energy Research Associates, 2006).
16. The discussion on why we are not running out of natural resources is based on (Reisman, 1996, pp. 63-67).
17. For examples of equating those who reject claims concerning manmade global warming with those who deny the Holocaust and calling for criminal trials against them, see (Kingston, 2005) and (O'Carroll, 2009). On the bully tactics of politicians, see (Anonymous, 2006). On the call for the de-certification of scientists, see (Cullen, 2006).
18. For some examples, see (Singer, 1992), (Ellsaesser, 1992), (Idso, 1992), and (Black, 1992). Also see, (Emsley, 1996), (Robinson, Robinson, & Soon, 1998), (Lomborg, 2001, pp. 258-324), and (Michaels, 2005) for more examples.
19. See the Oregon Institute of Science and Medicine "Petition Project" at http://www.oism.org/pproject/.
20. As quoted in (Schell, 1989).
21. My discussion of the nature of environmentalism is based on (Simpson, 2005, pp. 143-146).
22. See (Williams, 2007) for the quotations in this paragraph.
23. For a thorough discussion of rational egoism and individual rights, see (Rand, 1964, pp. 13-39

and 108-117). On capitalism, see (Rand, 1967, pp. 11-34).

REFERENCES

Alaska Wilderness League. (2001, April 9). Despite Congressional Opposition, Bush Budget Features $1.2 Billion From Arctic Refuge Oil Leasing. *The Arctic Truth,* 1(43).

Allen, E. (2003, December 3). San Antonio-Based Refiners Defend Clean-Air Additive that Pollutes Water. *San Antonio Express-News,* p. 1E.

American Automobile Association. (2011, October 7). Daily Fuel Gauge Report. Retrieved from http://www.fuelgaugereport.com/

American Petroleum Institute. (2011, July). Motor Fuel Taxes, Summary Report. Retrieved from http://www.api.org/statistics/fueltaxes/

Anonymous. (1994, October 13). Dismantling of the Shoreham Nuclear Plant Is Completed. *The New York Times,* p. B6.

Anonymous. (2002, June 14). The Life and Deaths of DDT. *Wall Street Journal,* p. A12.

Anonymous. (2005, September 26). Attention to Refining. *Oil & Gas Journal,* 103*,* 21.

Anonymous. (2006, November 2). Inside Politics: Shut Up, They Said. *The Washington Times,* http://www.washingtontimes.com/news/2006/nov/02/20061102-120635-8944r/?page=

Anonymous. (2007a, May 12). After Yukos. *The Economist,* pp. 67-68.

Anonymous. (2007b, February 4). France and 45 Other Countries Call for World Environmental Monitor-Europe-International Herald Tribune. *The New York Times,* http://www.nytimes.com/2007/02/04/world/europe/04iht-climate.4466254.html

Anonymous. (2008, January). Barack Obama Interview with the *San Francisco Chronicle*. Retrieved from http://www.youtube.com/watch?v=Hdi4onAQBWQ

Anonymous. (2011, April 22). Obama Looks into Oil Fraud. Retrieved from http://www.valleynewslive.com/story/14496104/obama-examines-gas-prices

Antosh, N. (2003, August 21). Gasoline Line Repair Expected by Weekend. *Houston Chronicle.*

Baker, D.R. (2000, August 5). PG&E Abandons Power Plant Plan For Barge in Bay. *San Francisco Chronicle,* p. A1.

Bernstein, A. (2001). The Welfare State Versus Values and the Mind. *Intellectual Activist,* 15(10), 11-24.

Beveridge & Diamond. (2007, April 4). Supreme Court Reverses Fourth Circuit in *Duke Energy Corp.* Retrieved from http://www.bdlaw.com/news-152.html

Black, P.E. (1992). It's the Water! In J.H. Lehr (Ed.), *Rational Readings on Environmental Concerns*, (pp. 433-437). New York: Van Nostrand Reinhold.

Broad, W.J. (2006, November 7). In Ancient Fossils, Seeds of a New Debate on Warming. *The New York Times.*

California Energy Commission. (2005, November). *Integrated Policy Report.* Available from http://www.energy.ca.gov/2005publications/CEC-100-2005-007/CEC-100-2005-007-CMF.PDF

Cambridge Energy Research Associates. (2006, November 14). Peak Oil Theory—'World Running Out of Oil Soon'—Is Faulty; Could Distort Policy & Energy Debate. Retrieved from http://groups.yahoo.com/group/energyresources/message/96167

Courtois, S., Werth, N., Panné, J., Paczkowski, A., Bartosek, K., & Margolin, J. (1999). *The Black Book of Communism: Crimes, Terror, Repression* (J. Murphy & M. Kramer, Trans.). Cambridge, MA: Harvard University Press.

Cullen, H. (2006, December 21). Junk Controversy Not Junk Science…. Retrieved from http://www.weather.com/blog/weather/8_11392.html

Deming, D. (2003, January 29). Are We Running Out of Oil? Policy Backgrounder No. 159. Retrieved from http://www.ncpa.org/pdfs/bg159.pdf

Ehrlich, P.R. & Ehrlich, A.H. (1996). *Betrayal of Science and Reason: How Anti-Environmental Rhetoric Threatens Our Future.* Washington, DC: Island Press.

Ellsaesser, H.W. (1992). The Great Greenhouse Debate. In J.H. Lehr (Ed.), *Rational Readings on Environmental Concerns*, (pp. 404-414). New York: Van Nostrand Reinhold.

Emsley, J. (Ed.). (1996). *The Global Warming Debate.* London: The European Science and Environment Forum.

Garay, A. (2003, August 27). Motorists Paying Higher Prices for Gasoline. *Arizona Daily Sun.*

Glain, S.J. & Howe, P.J. (2004, May 20). Clean-Air Rules Fuel Gas Run-Up. *Boston Globe.*

Graber, D.M. (1989, October 22). Mother Nature as a Hothouse Flower. *Los Angeles Times Book Review*, p. 1.

Gwartney, J.D., Stroup, R.L. & Sobel, R.S. (2000). *Economics: Private and Public Choice* (9th ed.). Fort Worth, TX: The Dryden Press.

Gwynne, P. (1975, April 28). The Cooling World. *Newsweek,* p. 64.

Hammerton, J. (2011, July 21). End of the Line: Why the EPA Train Wreck Must Be Stopped. Retrieved from http://www.freedomworks.org/publications/end-of-the-line?src=nl

Hanson, K. (2006, October 25). Groups Sue Southern California Air Quality Agency Over New Power Plants. *Long Beach Press-Telegram.*

Hays, K. (2007, March 7). ExxonMobil to Hand Over the Reins: Oil Giant Says it Will Give Control of Orinoco Basin Project to Venezuela. *Houston Chronicle.*

Hayward, S.F. (2011, April 18). The Gas Revolution. *The Weekly Standard,* 16*,*

http://www.weeklystandard.com/articles/gas-revolution_557014.html

Idso, S.B. (1992). Carbon Dioxide and Global Change: End of Nature of Rebirth of the Biosphere? In J.H. Lehr (Ed.), *Rational Readings on Environmental Concerns*, (pp. 414-433). New York: Van Nostrand Reinhold.

Isaac, D. (2001, January 22). California's Recipe For Energy Crisis: When Demand Booms, Forget Supply. *Investor's Business Daily,* p. A28.

Jaccard, M. (2005). *Sustainable Fossil Fuels: The Unusual Suspect in the Quest for Clean and Enduring Energy.* Cambridge: Cambridge University Press.

Jacoby, J. (2008, June 4). No Profits, No Oil. *Boston Globe,* http://www.boston.com/bostonglobe/editorial_opinion/oped/articles/2008/06/04/no_profits_no_oil/

Jones, J.H. (2007, May 22). State Puts Another Powerlink Option on the Table. *San Diego Union-Tribune,* http://www.signonsandiego.com/uniontrib/20070522/news_1m22route.html.

Jukes, T.H. (1992). The Tragedy of DDT. In J.H. Lehr (Ed.), *Rational Readings on Environmental Concerns*, (pp. 217-220). New York: Van Nostrand Reinhold. (Reprinted from *Farm Chemicals,* 1988)

Kingston, M. (2005, November 21). Himalayan Lakes Disaster. *The Daily Briefing,* Retrieved from http://webdiary.com.au/cms/?q=node/986

Leung, C.C. (2007, July 3). Human Greed Takes Lion's Share of Solar Energy. *Sydney Morning Herald,* http://www.smh.com.au/news/environment/human-greed-takes-lions-share-of-solar-energy/2007/07/02/1183351126304.html#

Lifsher, M. (2008, December 19). Desert Power Line Gets Ok. *Los Angeles Times,* http://articles.latimes.com/2008/dec/19/business/fi-sunrise19

Lomborg, B. (2001). *The Skeptical Environmentalist: Measuring the Real State of the World.* Cambridge: Cambridge University Press.

Lynch, M. (2002). Forecasting Oil Supply: Theory and Practice. *The Quarterly Review of Economics and Finance,* 42*,* 373–389.

Lynch, M. (2009, August 24). 'Peak Oil' Is a Waste of Energy. *The New York Times,* http://www.nytimes.com/2009/08/25/opinion/25lynch.html

Mares, D.R. & Altamirano, N. (2007, March). *Venezuela's PDVSA and World Energy Markets: Corporate Strategies and Political Factors Determining Its Behavior and Influence.* Available from http://www.rice.edu/energy/publications/docs/NOCs/Papers/NOC_PDVSA_Mares-Altamirano.pdf

Marson, B. & Vandeveire, M. (2003, August 19). Phoenix Receiving Most of Its Usual Gasoline Supply. *Arizona Daily Star.*

Michaels, P.J. (Ed.). (2005). *Shattered Consensus: The True State of Global Warming.* Lanham, MD: Rowman & Littlefield Publishers, Inc.

Migliore, G. (2011, July 29). CAFE Standards Set to Rise to 54.5 MPG for 2025. *AutoWeek*. Retrieved

from http://editorial.autos.msn.com/blogs/autosblogpost.aspx?post=2d53125a-4f68-44a0-b8c3-65ef61a5a1c8

Mims III, F.M. (2006, March 31). Meeting Doctor Doom. *The Citizen Scientist.* Retrieved from http://www.freerepublic.com/focus/news/1607905/posts

MSNBC. (2004, January 8). Study Sees Mass Extinctions via Warming. Retrieved from http://www.msnbc.msn.com/id/3897120/

MSNBC. (2006a, October 30). Britain Seeks 'Bold' Climate Action, Hires Gore. Retrieved from http://www.msnbc.msn.com/id/15480912/

MSNBC. (2006b, November 14). Global Warming Causing Disease to Rise. Retrieved from http://www.msnbc.msn.com/id/15717706/

MSNBC. (2006c, September 14). Warming Expert: Only Decade Left to Act in Time. Retrieved from http://www.msnbc.msn.com/id/14834318/

Mufson, S. (2006, May 6). Congress Tells FTC to Define Price Gouging. *Washington Post,* p. D01.

Nakamura, D.N. (2003, August 11). U.S. Refining: A History. *Oil & Gas Journal,* 101*,* 15.

NucNet. (2006, February). Chernobyl Fact File. Retrieved from http://www.neimagazine.com/journals/Power/NEI/April_2006/attachments/NucNetChernobylFactFile.pdf

O'Carroll, E. (2009, July 3). Are Climate-Change Deniers Guilty of Treason? *Christian Science Monitor,* http://www.csmonitor.com/Environment/Bright-Green/2009/0703/are-climate-change-deniers-guilty-of-treason

Oliver, C. (2001, January 8). California's Home-Bred Energy Crisis: Blame Government, Not Deregulation. *Investor's Business Daily.*

Paulson, M. (1999, July 2). One Dam Down; Others in Line. *Seattle Post-Intelligencer,* p. A1.

Peterson, S. (2000, December 8). Chernobyl Closes, Legacy Endures. *Christian Science Monitor,* 93.

Pohl, M.M. (2002). Bringing Down Our Dams: Trends in American Dam Removal Rationales. *Journal of the American Water Resources Association,* 38*,* 1511-1519.

Rand, A. (1964). *The Virtue of Selfishness.* New York: Signet.

Rand, A. (1967). *Capitalism: The Unknown Ideal.* New York: Signet.

Rand, A. (1971). *The New Left: The Anti-Industrial Revolution.* New York: Signet.

Rand, A. (1989). Introducing Objectivism. In L. Peikoff (Ed.), *The Voice of Reason,* (pp. 3-5). New York: Meridian. (Reprinted from the *Los Angeles Times,* June 17, 1962)

Ray, D.L. (1992). Radiation Around Us. In J.H. Lehr (Ed.), *Rational Readings on Environmental Concerns,* (pp. 589-603). New York: Van Nostrand Reinhold. (Reprinted from D.L. Ray and L Guzzo, *Trashing the Planet,* Washington, DC: Regnery Gateway, 1990)

Reisman, G. (1996). *Capitalism: A Treatise on Economics.* Ottawa, IL: Jameson Books.

Reisman, G. (2006, August 14). Mining for the Next Million Years. Retrieved from http://georgereisman.com/blog/2006/08/mining-for-next-million-years.html

Reisman, G. (2007, February 9). The Environmentalist Noose is Tightening. Retrieved from http://georgereisman.com/blog/2007_02_01_archive.html

Robinson, A.B., Robinson, N.E., & Soon, W. (1998, January). Environmental Effects of Increased Atmospheric Carbon Dioxide. Retrieved from http://www.oism.org/pproject/s33p36.htm

Rubenstein, D. (2000, February). A Barrage of Environmental Lawsuits Slams Several Midwestern Coal-Fired Utilities. *Corporate Legal Times,* p. 70.

San Diego Gas & Electric. (2010a). Setting the Record Straight: The Facts about the Sunrise Powerlink. Retrieved from http://www.sdge.com/sunrisepowerlink/info/Myth_v_Fact.pdf

San Diego Gas & Electric. (2010b). Sunrise Powerlink, Frequently Asked Questions. Retrieved from http://www.sdge.com/sunrisepowerlink/FAQs.html

Schell, J. (1989, October). "Our Fragile Earth," *Discover,* 10*,* 44-50.

Silverstein, K. (2006, August 30). Clean Air Clarity May Come. *EnergyBiz Insider.* Retrieved from http://www.energycentral.com/centers/energybiz/ebi_detail.cfm?id=200

Silverstein, K. (2010, December 9). Can the Courts Order Carbon Cuts? *Energy Biz.* Retrieved from http://www.energybiz.com/article/10/12/can-courts-order-carbon-cuts

Simpson, B.P. (2005). *Markets Don't Fail!* Lanham, MD: Lexington Books.

Simpson, B.P. (2008-2009). The Assault on Energy Producers. *The Objective Standard,* 3(4), 55-70.

Simpson, B.P. (2011). The Effect of Environmental Regulations and Other Government Controls on Oil and Gasoline Production. *Energy & Environment, 22,* 151-166.

Singer, S.F. (1992). Global Climate Change Facts and Fiction. In J.H. Lehr (Ed.), *Rational Readings on Environmental Concerns,* (pp. 393-403). New York: Van Nostrand Reinhold. (Reprinted from *World Climate Report,* 2(4), 1990)

Snow, N. (2005, July 18). NPRA's Timely Capacity Tally. *Oil & Gas Journal,* 103*,* 29.

Snow, N. (2006a, May 8). Industry Groups Reply to Anger Over Gasoline Prices. *Oil & Gas Journal,* 104*,* 27.

Snow, N. (2006b, August 7). U.S. Refining on Tightrope. *Oil & Gas Journal,* 104*,* 26.

Stuckey, M. (2007, January 22). Nuclear Power 'Wave'—or Just a Ripple? Retrieved from http://www.msnbc.msn.com/id/16272910/from/ET/

Suarez, R. & Coyle, M. (2007, April 2). Supreme Court Says EPA Can Regulate Greenhouse Gases. *PBS*

Newshour [Television broadcast]. [Transcript]. Retrieved from http://www.pbs.org/newshour/bb/law/jan-june07/scotus_04-02.html

Talev, M. (2004, June 2). Oil Firms Get Blame for High Gas Prices. *The Sacramento Bee.*

Temple, J. (2005, June 17). Refineries Upgrade Local Facilities. *Contra Costa Times.*

U.S. Department of Energy. (2006a, May). *A Primer on Gasoline Prices.*

U.S. Department of Energy. (2006b, August). *National Electric Transmission Congestion Study.* Available from http://nietc.anl.gov/documents/docs/Congestion_Study_2006-9MB.pdf

U.S. Energy Information Administration. (2009). Table 4 - Electric Power Industry Capability by Primary Energy Source, 1990 Through 2009. Retrieved from http://www.eia.doe.gov/cneaf/electricity/st_profiles/california.html

U.S. Energy Information Administration. (2011, April 28). Annual U.S. Percent Utilization of Refinery Operable Capacity, 1985-2011. Retrieved from http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pet&s=mopueus2&f=a

Vogel, N. (2000, December 9). How State's Consumers Lost with Electricity Deregulation. *Los Angeles Times,* p. A1.

Wakeland, J. (2001). California's Green Brownout, Part 1. *Intellectual Activist,* 15(3), 15-30.

Wakeland, J. (2002). The Electricity Papers. *Intellectual Activist,* 16(6), 23-28.

Watkins, G.C. (2006). Oil Scarcity: What Have the Past Three Decades Revealed? *Energy Policy,* 34, 508-514.

Williams, A. (2007, July 1). Buying into the Green Movement. *The New York Times,* p. 9:1.