

My THINKING CAP

Solutions for Global Crisis

Chapter 3
A Solution for the Energy Crisis

Brad Fregger



My Thinking Cap

By Brad Fregger

© 2008 Brad Fregger

Groundbreaking Press
8305 Arboles Circle
Austin, TX 78737
(512) 657-8780
www.groundbreaking.com

Library of Congress Control Number: 2008905960

ISBN: 0-9793542-6-9

First Edition

Editor

Barbara Foley

Book Design & Production

M. Kevin Ford

Cover Design & Production

M. Kevin Ford

Original Front Cover Image

M. Kevin Ford

All rights reserved. No part of this book may be reproduced or utilized in any form by any means, electronic or mechanical, including photocopying or recording, or by any information storage and retrieval system, without permission in writing from the author.

3

A Solution for the Energy Crisis

There is one reasonable solution that would solve our energy crisis easier and faster than any other proposal being offered. It is a solution that will take commitment and sacrifice. As the commercial said, “You can pay me now, or you can pay me later.”

Here are the major components of our energy crisis:

- Dependence on foreign oil to run our economy; most of this oil is being used to power our automobiles;
- World-wide pollution caused mainly by automobiles and trucks;
- A move by environmental lobbies to limit individual freedoms in order to “save” the world from catastrophic climate change;
- A dramatic increase in individual and corporate taxes to fund the changes needed to “fix” the societal problems that have “caused” global warming,
- At least three countries that would like nothing better than to see the United States defeated—and, if they can’t beat us militarily, they will do everything in their power to beat us economically. These countries are Russia, Iran, and Venezuela.

Sooner or later we are going to have to face these issues; the reasonable solution offered in this chapter allows us to move forward immediately.

Interestingly, a public announcement of our commitment to this solution would have the immediate effect of lowering the world price of oil, with the result that gasoline prices would quickly drop back to more acceptable levels; and, Russia, Iran, and Venezuela would have less cash with which to cause us, and the rest of the world, problems.

Lowering the price of oil would also lower the price of transportation, food, and other commodities. The increase in price of these items, caused in part by the increase in the price of oil and other decisions made to try to “stop global warming,” is already causing problems worldwide with food riots in Mexico, Egypt, and other countries.

So, what follows is a reasonable solution to the energy crisis that would have additional benefits that could help people throughout the world and assure our societies future social-economic health; as well as cause major difficulties to those who would like nothing better than to see the United States as a minor player on the world’s stage.

A Reasonable Solution to the Energy Crisis

I am a loyal, committed citizen of the United States who believes that the legislative and executive branches of our government have let us down by catering to the many powerful special interest groups that control our elections; in this case, big business and the environmental lobby. Because of the power these lobbies exert over our government, it is almost impossible to make the right decisions regarding our ability to achieve energy independence and secure our future as a nation. The personal interests of big business and the environmental lobby essentially block any legislation that would solve this problem.

The following statements are the basis for this chapter and the solution I am presenting.

- It would be to the world's advantage to minimize pollution of any kind.
- It would be to our advantage to become energy independent.
- It would be to our nation's advantage to limit the influence of Russia, Iran, and Venezuela in regard to the world's oil supply.
- It would be to our advantage to be proactive in solving the energy crisis.

- There is no need to limit the personal use of gasoline, light bulbs, or any other commodity. Given the proper choices, the market will handle the issue.
- We must be very careful about what laws and, therefore, requirements and restrictions, we allow government to place on our citizens, organizations, and/or companies.
- It would be to our advantage to hold a vision of the future where we have succeeded in becoming energy independent and continue to be the country that people throughout the world look up to and dream of becoming citizens of, a model that despots fear.

There is no doubt in my mind that my proposed solution is the best for many reasons. However, it is not a perfect solution and the interests of the two major lobbies I have mentioned will be impacted negatively. In addition, there will be major problems for local, state, and federal governments with the resulting loss in tax revenue.

This means that the rest of us will have to apply sufficient pressure on our elected representatives to force them to create legislation that will create a path to energy independence. This proactive legislation will provide the vision needed to keep us on the path to socio-economic health and success.

By the way, if you believe that a strong United States is a threat to the world, you might as well stop reading.

History has shown that the United States is the most caring, compassionate, and sharing nation the world has ever seen.

Never before has a conqueror (World Wars I and II) been so kind to those conquered. Never before has a nation with ultimate power (the atom bomb) chosen not to use it to control the rest of the nations of the world. Never before has a conquering nation allowed those conquered to form their own governments and make their own alliances, whether or not the conquering nation agreed with the decisions made. Never before has a nation been so willing to help those in need, no matter who they were, or what God they prayed to.

Of course, we aren't perfect, but we are the best ... and I, for one, want that to continue to be true.

So, how do we become energy independent, in a reasonable length of time, while minimizing pollution, especially carbon-based pollution, and creating an environment where individual choice is a commitment, business can thrive, and our nation can look forward to decades of socio-economic health; while, at the same time, limiting the influence of Russia, Iran, and Venezuela? Seems like a tall order, doesn't it? Actually, it is a relatively easy problem to solve, with the clear understanding that any

change, no matter how positive, causes problems for some.

There is no doubt that transportation vehicles (cars and trucks) are the greatest polluters that exist in the world today. And, this problem is not going away; in fact, with the increase in the use of automobiles throughout the world, especially China and India, the problem is only going to get worse. If we could just solve the vehicular pollution problem, we would go a long way to solving the pollution problem world-wide. In fact, solving this one problem would have a greater positive effect on the environment than any other solutions I have seen proposed.

Any solution that suggests doing without automobiles will never work; it is naïve to even consider such a solution. Likewise, it is unreasonable to consider limits to socio-economic growth. In fact, it is dangerous to try to implement such solutions, as the impact on our economy would likely result in a depression that would cause greater suffering than global warming will ever cause.

First of all, let's take a look at our alternatives to gasoline as vehicular fuel.

Propane, Natural Gas, and Methanol

Propane, natural gas, and methanol are popular alternative fuels that are readily available. When compared with gasoline, these fuels produce fewer air pollutants and greenhouse gas emissions, but they are not zero-pollution alternatives. Existing vehicles can be converted to use these fuels, or a combination of one of them and gasoline; and there are some factory-produced vehicles being manufactured. While the use of these fuels continues to increase world-wide, there are major problems with considering these fuels as a replacement for gasoline.

First, natural gas is not a renewable resource and while currently readily available, it has many other important uses, which makes the decision to use it problematic as a major-source vehicular fuel.

Finally, there is an infrastructure issue that goes beyond the manufacturing of vehicles that use these fuels. The issue is building the service stations that would be needed to service the hundreds of millions of automobiles in the United States; and then, manufacturing and transporting the fuel to the millions of service stations needed. And, of course, natural gas and propane are both extremely flammable; while much has been done to minimize the danger, the potential for loss of life due to gas explosions is still there.

These fuels provide an alternative in specific cases (fleet vehicles, lift trucks, etc.) but this is not a good solution as the major replacement fuel for gasoline.

Ethanol

Ethanol can be made from renewable resources such as corn, sugar cane, grain, wood, etc. Most conventional vehicles can use up to 10 percent ethanol without any modifications. Many states have filling stations offering such blends. Use of ethanol reduces greenhouse gas emissions. These are the positives; however, there are many negatives to using ethanol as a replacement for gasoline.

The major issue here is corn ethanol. Corn is a food, and not just any food. Corn oil is used in millions of products; our livestock (cows, pigs, chickens, etc.) eat corn; and then, of course, there are the hundreds of millions of people around the world who depend on corn as a major source of nutrition.

Many, who profess to care about the world and the people in it, seem unaware of the impact that the use of corn ethanol has already had on the world-wide food supply. The price for all corn-fed livestock has increased significantly, driving up the price of meat, eggs, and dairy products, as has the price for all corn products, including

the staples in some countries, especially Mexico. This is just the beginning. If all the available land in the U.S. were set aside to grow corn, it would still only supply a small percentage of our national needs.

Corn is expensive to convert to fuel and, unlike oil, pipelines cannot be used to take it from manufacturing to distribution. Ethanol must be trucked to all major distribution centers and then trucked to the service stations.

For all of these reasons, there is a strong likelihood that corn-ethanol fuel will be more expensive than gasoline. In other words, converting nationally to corn ethanol to solve the energy crisis is a very bad decision, and the only reason it is being suggested is that the technology exists and it looks like it can have an immediate impact on the problem. This is extremely short-sighted thinking, thinking that is, as I have already stated, causing problems world-wide.

The other ethanol choices aren't much better. They still take lots of land to grow the source, which means cutting down virgin forests and limiting the use of the source for other uses ... thereby driving up the prices of other commodities. There is already great concern about the loss of our virgin forested land, especially in the Amazon basin; converting to ethanol would require that these forested lands be used to grow the plants needed to produce ethanol.

Even the use of scrap cellulose, corn husks, wood scraps, etc. would have an insignificant impact when one considers the amount of fuel needed to run the world's vehicles today and in the future.

Biodiesel

Biodiesel can be made from vegetable oils and animal fats. It produces fewer emissions than regular diesel and is biodegradable. However, the biggest problem here is the short supply. There will never be enough of this stuff to even begin to replace even a small percentage of the fuel needed.

Hydrogen

Hydrogen is often touted to be the vehicle fuel of the future. There is no doubt that when produced from renewable sources, hydrogen has the potential to be one of the cleanest alternative fuels. Hydrogen gas is the most abundant element on earth, but it needs to be extracted from compounds such as natural gas or water before it is available as a fuel. It will likely be many years before hydrogen is a cost-effective and commercially available fuel. In other words, the technology to do this at a reasonable cost, while having a negligible impact on the

environment, does not yet exist. Some experts estimate that it might be as long as 25 years before hydrogen is ready to replace gasoline as a vehicular fuel.

And, once we've got the technology to produce it, we still have to deliver it to the consumer. Again, the infrastructure issue raises its ugly head. Creating an entirely new distribution channel will take billions of dollars, large resources, and assure us that the cost of the fuel will most likely be much more expensive than gasoline. Hydrogen fuel is also highly explosive with very real danger during transportation and even in the home garage. All of this means that hydrogen, as a competitor to gasoline, is a long, long way into the future.

Electricity

Electric-powered vehicles produce no tailpipe emissions; however, they do use electricity from sources such as electric power generating facilities, which do produce pollution. However, there have been, especially here in the U.S., significant advances in controlling the pollution from these facilities. There is no doubt that it is much easier to control the pollution from an identified number of plants, than it is to control the pollution from 300-million plus vehicles.

The major problem with electric-powered vehicles has been the distances that they can travel without

having to recharge the batteries; however, technologies continue to improve, with the Tesla all-electric car getting a range of 220 miles on a single charge (3.5 hours) with a 135 mpg equivalent to a gasoline-powered car (about 2 cents a mile). The battery life is approximately 100,000 miles. Regarding other performance issues, the Tesla accelerates from 0 to 60 in less than 4 seconds and has a top speed of 125 miles per hour.

This performance pretty much eliminates all other options, which, in addition to poorer performance, are more expensive than gasoline to operate; while the all-electric costs significantly less than gasoline to operate. I haven't even mentioned maintenance, which is another advantage of the all-electric. The main maintenance issue with an all-electric is the need to rotate the tires and replace the brakes; there are no oil changes or tune-ups needed. Add all of this to the prior-mentioned facts that we know how to build an all-electric, and we know how to generate electricity, and it seems like an obvious solution ... but, how about the infrastructure issue?

When I'm talking to groups about this option, I ask the question, "We have service stations to refuel our gasoline-driven vehicles, so ... how many service stations exist to refuel our electric-driven vehicles?" Usually the response is well under 1000.

Almost everyone is surprised when I tell them that there are well over 300-million refueling stations already in existence. ... This includes, of course, every home and business in the U.S. The infrastructure for refueling electric vehicles already exists; you just pull your vehicle into the garage and plug it in. And, even more impressive, adding more service stations at every parking garage, motel, office, etc. will be a very simple process.

Even after mentioning all of these positives, I still get objections. One of the major objections I get is, “Where is all this electricity coming from?” First of all, in the beginning, this will not be much of an issue. Remember, most of this recharging will take place overnight, when our electrical usage nationwide is at its lowest levels. Additionally, individuals have the capability to create their own electricity; some are doing that currently, using either solar cells or windmills.

There is no doubt that, initially, we will have to build additional electric generating power plants. However, as I stated earlier, it is much easier to control pollution from a number of power plants than from 300-million plus vehicles. What is important here is that we make reasonable decisions, which means we have to ignore the fanatical side of the environmental lobby—currently the major block to achieving the resources we need.

We must keep in mind that, with this focus, we would be on the road to dramatically reducing vehicle-caused pollution in a very short time and, effectively, eliminating it altogether in the long run. Transportation vehicles account for about two-thirds of all pollution and possibly one-third of carbon-based pollution (depending on what expert you're using). Just solving half of this problem would provide better results than most other, much more expensive solutions can even dream of.

Regulations on coal and oil burning, and nuclear power plants must be kept at a reasonable level, while we continue to do the research needed to improve our ability to eliminate the pollutants these plants tend to produce. At the same time, we must continue to improve the efficiency of solar, wind, and tidal-generated electricity, all of which have essentially zero emissions. This research is continuing at a rapid rate; for example, research in solar cell technology is advancing at an exponential rate. It is conceivable that we will see extremely efficient solar cell technology within the next decade.

If you are wondering who would purchase an all-electric vehicle, just watch the documentary titled, *Who Killed the Electric Car?*. The movie is currently available on YouTube in one form or another, and I am sure that it can be purchased from your local bookstore or an online retailer.

The mistake most experts make when considering the viability of a car that takes 3.5 hours to fill up after driving about 200 miles, is forgetting completely the number of people who would love to own a vehicle designed only for trips within 100 miles of their home. Millions drive less than 200 miles round-trip every day, spending the vast majority of their gas money on relatively short trips, not on long trips.

There is a strong possibility that families will either have two cars, one for everyday driving and one for longer trips; or that they will buy a car for everyday driving and rent when they want to take a long trip. *Who Killed the Electric Car?* strongly supports the number of people who would love to have an efficient, well-performing, electric car, even if the range was significantly less than 200 miles.

And this solution is only temporary. There's no reason not to expect that within the next decade we will have batteries that enable the all-electric to go 500 miles on a single charge. And, then, I can easily envision a 1000-mile battery in the future, or even better, an efficient solar cell that will enable a vehicle to automatically recharge. There is no doubt that the all-electric is the vehicle of the future—there is no other alternative that can compete with it.

The desirability of the all-electric was proven in California in the 1990s. At that time, the Air Resources

Board (ARB) required that in 1998, of the vehicles produced for sale in California, 2 percent had to be Zero-Emissions Vehicles (ZEVs), increasing to 5 percent in 2001, and 10 percent in 2003. GM and a few other major auto manufacturers produced all-electric cars to meet the requirements, and the lucky few that were able to lease the GM vehicle gave it an outstanding review. This was achieved in spite of the fact that the GM all-electric's range was between 50 and 100 miles.

In fact, the car was so successful that GM (and the U.S. Government) convinced California to eliminate its requirement for a zero-emission automobile. As soon as the requirement was lifted, GM immediately took back all of their leased electric cars and destroyed them. If any remain, they are kept under lock and key and only GM executives are allowed to see them. The reasons (I believe) they took such drastic action are discussed in the negative implications of the all-electric vehicle on page 44.

It is interesting to conjecture about what took place at GM when they realized that they had to produce a zero-emission car. My guess, and it is only a guess, is that initially they didn't think it was possible. However, they needed to make an honest attempt before they complained to California and the Federal Government. So they formed a small "skunk works" and gave them

the challenge, including the money, resources, and authority to make it happen.

I'm sure that the GM executives were as surprised as anyone when the car that the skunk works developed was so successful. Since they couldn't allow this to happen, they called on the Federal Government and pressure was applied on California to change its requirement ... thus, it was GM, the oil companies, and the Federal Government that "killed the electric car." As you will see, they had, as far as they were concerned, very good reasons to take this action.

Many also ask me about the hybrid. There is no doubt in my mind that most hybrids are purchased by people who want to show that they care about the environment. While the gas mileage in city driving is greater, there is little improvement in freeway driving, especially long distances. In addition, the issues of dealing with a car that has both a gasoline and an electric engine are hardly worth the effort, considering the amount of energy and pollution saved. Another reason for the marketing of the hybrid is that it is an electric car that still needs a lot of maintenance, which is significant to the profitability of the auto industry.

So far it seems like the all-electric car is a "no brainer" for the future of vehicular traffic in the U.S. (actually the world) for these reasons:

- Current equivalent gas mileage is 135 mpg (10 times some trucks and SUVs, and well over twice the best of any of the current hybrids), and that will only get better as battery and solar cell technology improves;
- Technology to manufacture the car and produce the fuel exists and has been fully tested;
- Performance is equal to, or better than, gasoline-fueled cars;
- Maintenance costs are way below that of gasoline, or any other alternative;
- Infrastructure to deliver the fuel is already in existence and is actually superior to what exists for gasoline.

I haven't even mentioned how silently they run. ... Yes, we also get an end to noise pollution! So, if all of this is true, what's the problem?

The negatives of the all-electric are essentially economic, with the fanatical fringe of the environmental lobby adding frosting to the cake. It is interesting that these two lobbies, which have no great love for each other, form such a strong alliance against us making the right decisions for energy independence, our socio-economic health, and the future of our country.

The profitability of the oil and auto companies currently depends on the continued use of gasoline for vehicular fuel. For the auto companies, it's the servicing of these vehicles; and for the oil companies, it's the importance

of gasoline. Any decision supporting all-electric vehicles as a replacement for gasoline-fueled vehicles would significantly impact the profitability of these companies.

There are also strong legal precedents against making any corporate decisions that would be negative to shareholder's investments. This means that these companies are duty bound to fight any decision that would move us from gasoline. And, don't forget, the vast majority of the stock of both the auto and oil companies is owned by average U.S. citizens in either stocks, pension plans, or mutual funds.

In addition, nine of the ten largest companies in the world are either oil or auto companies. Any significant change to their profitability could potentially cause a world-wide depression that could result in millions suffering great hardship. I believe that this was a major reason for the government siding with GM to convince California to eliminate the zero-emission requirement. And, let's not forget the importance of gasoline tax revenue for our local, state, and federal governments. All things considered, it is no wonder that the pressure to keep things as they are is immense.

I'm less worried about the success of the all-electric car causing a world-wide depression than I was ten years ago. Recently we have seen that large companies are able to survive major upheavals in their market.

The best example of this is Kodak which experienced the total destruction of their market when digital technology replaced film in a remarkably short period of time. After a major reorganization, Kodak, is again seeing profits rise, finishing 2007 with a very nice increase.

This doesn't mean that it will be easy for oil companies to replace their revenues, but they will have time to make the plans necessary for their continued success. There is no doubt that they will find ways to use oil to produce the additional electricity that this solution demands; and, that they will quickly find ways to control the emissions from those plants.

The auto companies will have an easier time of it, since the bulk of their revenue comes from the sales of cars. However, there are millions of people dependent on the fueling and servicing of gasoline-driven automobiles; they will, of course, have to make adjustments as more and more of us move from gasoline vehicles to the all-electric vehicles of the future. And, I'm sure government will find a way to replace the lost gasoline tax revenue.

As you can see, these are powerful reasons for both the government and the oil and auto companies to fight any major switch to the all-electric vehicle. In fact, ten years ago I would have supported this decision. ... However, times have changed, and we must revisit the need to go all-electric.

Below are the reasons we must seriously consider making the tough decisions necessary if we are going to continue to be a major player in the world, instead of a “has been,” watching the rest of the world overtake us and control not only our future but our daily lives.

- Our entire infrastructure is dependent on the energy we purchase from other countries, who could just as easily decide to begin selling their oil to others.
- Our safety as a nation is threatened by three countries (Russia, Iran, and Venezuela) that, because of the amount of oil they control, have the funds and influence necessary to cause us harm, potentially great harm, if we don't act soon to solve this problem.
- The world is very concerned about the impact of gasoline-fueled vehicles on world-wide pollution and climate change.
- Our nation's vision of the future is becoming increasingly negative as the economy seems to be moving toward a full-blown recession, and we don't seem to be able to do anything proactive to change the direction things are going. We're a nation of doers, we don't like sitting around waiting for things to happen; we like being in control.

All of these issues are solved by a concentrated focus on the all-electric vehicle. Here's what we need to do:

- As a nation, we should commit to all-electric technology, including a “Manhattan Project” to develop, first, 500-mile range, and then, 1000-mile range electric vehicles that meet at least the current performance standards of the Tesla all-electric vehicle. At the heart of this project will be the research and development needed to mass produce the battery that will enable an all-electric vehicle to have this range.
- We must support, in every way possible, the development of extremely efficient solar cell technology. Achieving a efficient way to create electricity directly from sunlight will be a boon to all of humanity.
- Congress should immediately pass a zero-emission requirement that mandates that a minimum of 10 percent of all vehicles manufactured be zero emission by 2020, with the initial zero-emission vehicles being available to the public by 2012—or earlier if possible. (Remember, the technology exists and has been proven.)
- No laws should be passed limiting the ability of individuals to purchase gasoline-powered vehicles. There is no need to limit freedom in this regard. In fact, there should be no need to limit individual freedoms at all in regard to the issue of climate change and/or global warming; all that is needed is reasonable governmental policy.
- Government funding should be immediately available for the mass manufacturing of the batteries, etc. needed for the initial zero-emission vehicles so that they have a minimum range of 200 miles. Or, a tax credit could be

given to individuals purchasing all-electric vehicles, to help offset the current high cost of efficient batteries.

- Congress should immediately pass reasonable requirements for the building of electric power generating facilities using either coal, oil, or nuclear power. There is no doubt that our society will need much more energy in the future; we must start now if we are going to get the job done in time for our future needs.
- Congress should immediately offer significant incentives for the development of all cost-effective, alternative methods of generating electric power.

The “Manhattan Project” to develop 500- and 1000-mile range electric vehicles with at least the performance standards of the Tesla all-electric has advantages beyond the boon it would be to our goal of energy independence. Actually, calling it a “Manhattan Project” is probably a misnomer. The Manhattan Project was highly secretive and involved the development of the Atom Bomb. Einstein proposed the project after hearing that the Germans were trying to do the same thing. He knew if Hitler got the atom bomb first, that he would use it to conquer the world and wouldn’t care how many were killed in the process. However, he trusted (and rightly so) that the U.S. would not do that.

It is important that the project to develop 500- to 1000-mile range electric vehicles not be kept secret for a couple of very important reasons. First, this commitment

should have the same effect on our society that Kennedy's pronouncement for a landing on the Moon before the end of the century did. This goal was extremely positive in regard to our nation's socio-economic health.

For those of you who may believe the money was wasted, the initial research that I did for my Master's thesis suggested that the government received upwards of \$5.00 in taxes for every dollar spent on the Moon landing, kind of a hyper "trickle-down" effect. If this is true, the goal to reach the Moon by the end of the century was one of the best investments our government has ever made. This kind of positive vision of the future is essential for the socio-economic health of a society. I will cover the second reason why this project must be announced to the world at the end of this chapter.

While I am against government involvement in private matters, there are times when it is essential. For example, in our society it is against the law for a man to beat his wife and/or molest his children; this is a good law. In the instance of mandating zero-emission requirements, it is critical that they be stipulated by Congress; the auto companies cannot make this decision on their own. If they did, there would be no end to the lawsuits being brought by the companies' shareholders. Likewise, Congress has to hear from a vast majority of U.S. citizens

that this plan is essential. There is no doubt that the oil lobby will also fight it with every resource they have available.

However, I want to make note that the requirement is designed to get zero-emission vehicles on the road; there is no governmental requirement beyond the initial 10 percent. There is no doubt in my mind that the market will take care of the rest. Once you can buy a car that will handle all of your everyday needs, never need to go to a gas station for a fill-up, and cost about 2 cents a mile to operate, all of this with excellent performance ... the problem will quickly be, meeting the demand.

Owning a gasoline-powered vehicle should never be against the law. Hobbyists and traditionalists should be able to have their cars ... although ... there may come a time when they will have difficulty finding a gas station.

Congress will also have to be shielded from the fanatical end of the environmental lobby. They will do everything in their power to stop the construction of nuclear and oil- and coal-burning power plants, regardless of the safeguards put in place. Without the additional power that will be needed, this plan will fail and we will find ourselves no better off, still struggling to survive in an evermore competing world; a world that will care less and less about what happens to us. In fact, some will celebrate our decline.

Finally, regarding Russia, Iran, and Venezuela, there's no doubt that these three countries are using their oil revenue to increase their influence around the world and build up their militaries. Without the windfall profits these countries are getting from their oil, they will have a much harder time gaining the influence and military strength they need to achieve their goals, which I assume include replacing the United States as the world's major economic power. So, if we could dramatically lower the revenue they are getting from their oil, we would significantly impact their ability to realize their future plans.

It is critical to understand that we are in the middle of an economic world war. And, in this instance, the competition is not interested in compromise; they are out to get us and will celebrate in the streets if they are able to make it happen. There is a major rule in negotiation: when the other person/company/country is only interested in their winning and your losing, you will never win by compromise or collaboration. In this instance, you, also, must commit to winning; all the diplomacy in the world will not change the situation, but only delay the inevitable. So how do we win? By lowering the price of a barrel of oil to half of what it is right now; a price that reflects the supply and demand issue much more accurately. The process for accomplishing this is relatively easy and will happen automatically if this proposal is acted on.

While the price of the barrel of oil is influenced by many factors, I believe most experts would agree that the oil speculators are the major reason. Speculators drive up the price by anticipating the future and determining what a barrel of oil will cost a year or more from now. If they decide that the world situation will continue to be volatile and that the United States will continue to do nothing to change the situation, they will determine that the price of oil will continue to increase and, therefore, they will continue to bid it higher and higher. This type of investment is very much influenced by what they *believe* will happen. So, the answer is to create a future scenario where the price of oil will plummet.

This happens in business all of the time. It is surprising to me that Congress seems to have no idea that, in the main, they are the problem. By refusing to do anything positive toward energy independence, they are creating the situation that will assure continued increases in the price of gasoline.

Microsoft and other major companies understand the power of limiting the expectations of investors. If Microsoft is concerned that a new company will develop a technology that might impact their future profitability, they announce development of a similar technology. Just the announcement of their intention to develop this technology scares investors away, and the new company

finds that their investor base has dried up. There are no more skittish individuals, than investors ... create a scenario where they are likely to lose their investment, and they will run for the hills.

So, once Congress announces the "All-Electric Project" to develop a 500- to 1000-mile battery and the requirement for an available zero-emission vehicle by 2012 at the latest, the price of a barrel of oil will plummet to, probably, half of what it is now within six months. This will dramatically impact Russia's, Iran's, and Venezuela's future plans ... and, additionally, ensures us of a reasonable price for gasoline as the change is taking place.

This will, of course, be our biggest challenge: once the price of gasoline gets back to \$2.00 a gallon, we must stay committed to our goal of energy independence that can be achieved through the development of effective and efficient all-electric vehicles. It is critical that we stay committed to this course of action. Our future and the future of our children's children depend on it.

Author's Bio

Brad Fregger has 45 years combined experience in retailing, corporate training, publishing, and software development. He has worked in large and small companies, started three of his own businesses, and worked as a senior executive in two other startups. He is currently President/CEO of Groundbreaking Press, an author-services book publishing company. Additionally, Brad is a lecturer (professor) at Texas State University-San Marcos (Business Communications) and a member of the adjunct faculty at Franklin University (Business Ethics for Leaders) in Columbus, Ohio.

Brad taught graduate-level courses at Saint Edward's University in Austin, Texas for over five years, including one year (2002) as the Executive in Residence for the Graduate School of Management. Fregger helped develop and then teach courses in the MBA Program: Introduction to eCommerce and Managerial Communications; and the Master of Science in Organizational Leadership & Ethics: Leadership & Imagination.

He also designed and taught the on-line version of Introduction to eCommerce, which received strong reviews from the Instructional Technologies department at Saint Edward's. He also taught two other courses for

both the Graduate School of Management (Human Relations) and New College (Business Communications).

Brad is a practitioner/scholar, using the skills and knowledge he has learned to amass a remarkable record of accomplishment over the past 25 years, in addition to the numerous programs he developed as founder of three major corporate-training departments (Mervyns, Atari, and Activision).

He has produced more than 50 videos, 12 audio books, over 100 consumer and business enterprise software products, including the most successful computer game in the world (Shanghai) and the most played computer game in the world (computer solitaire), and published over 50 books on a wide variety of subjects.

He has completed every project begun in the past 25 years, and, even more important, during that time not a single team member left during the development of a product. This is what Brad calls "employee retention."

Brad is an expert in many critical areas of business, from customer service to the management of technology. He's an international speaker providing programs to major companies throughout the Middle East (Tunisia, Dubai, Beirut, Bahrain, Kuwait, and Qatar), Europe, and Canada in a broad spectrum of subjects including, Effective Leadership, negotiation, project management, technical risk management, creativity, and team building.

As an author, in addition to *My Thinking Cap - Solutions for Global Crisis*, he's written four other books, *Get Things Done - Ten Secrets of Creating and Leading Exceptional Teams*; *One Shovel Full - Telling Stories to Change Beliefs, Attitudes, and Perceptions*; *Lucky That Way - Stories of Seizing the Moment While Creating the Games Millions Play*; and *Why Publish - Making the Right Choices for Your Book*. Brad is currently writing his sixth book, *The Art of Leadership – A Practical Guide to Creating and Leading Organizational Teams*.

In addition, Brad has published articles in professional journals, including a series on book publishing for *Sharing Ideas* magazine (Los Angeles, California), an article on career change for *Career Planning and Adult Development Journal* (San Jose, California), and he wrote a column, "On a Tangent" for *Creative Pulse* magazine (Austin, Texas).

Brad's amazing ability to complete projects on time and on budget, plus his creative management style, caught the attention of Tom Peters (*In Search of Excellence*), who then featured Brad in his book, *Liberation Management*.

Brad is especially skilled in facilitation toward solving motivational and managerial communication issues. Brad believes that ineffective communication is at the heart of most personnel issues, but that these issues are often not solved by learning listening techniques.

“Courses that teach listening skills can be a waste of time. Why? Because we already know how to listen, we just choose not to at times. The secret is learning why we make this choice and why it’s important to make other choices.”

Brad holds a Master's Degree in Futuristics (San Jose State University). His speech, "Earthward Implications of Cosmic Migration," was given at the American Astronautical Society's proceedings in honor of the tenth anniversary of Apollo 11's landing on the moon. He is a frequent guest on radio-talk shows across the nation, usually discussing the future of our society in the areas of genetic engineering, space travel, virtual reality, and extinction-level events.

Brad and his wife/business partner, Barbara Foley, live in the Texas Hill Country south of Austin.

Brad can be contacted at:

Website: www.groundbreaking.com

Email: brad@groundbreaking.com

