Alternative Energy

For the past several decades, the prices of gasoline have risen substantially. According to the American Petroleum Institute, in March 1981 the average nationwide price of gas was $1.42. Compare that price with today’s national average of $3.87\(^1\), and you’ll see why so many Americans are stressing over the constant rise in gasoline prices. The first oil well in America was discovered in 1859, according to Clear Lead Inc., and over the years many strides have been taken to produce cleaner oil. Gasoline has clearly been the leading fuel for America, with 60% of all our transportation fueled by gas\(^2\); however, different forms of fuel have been focal points in today’s economy. From biodiesel to E85, alternative fuels have been different energy sources to put in our vehicles. However, there is one alternative that will one day prove to be more efficient than any of the other fuels: hydrogen.

The average price for regular gas in Georgia today is $3.67 according to GeorgiaGasPrices. Amazingly, this price is only the tenth lowest of all U.S. states, with Hawaii leading the states at $4.39/gallon\(^3\). Consequentially, the steady rise in gasoline prices has had a negative impact on consumers. Americans are more reluctant to go to the pump to fill up; many are merely filling their vehicles with just enough to last a certain distance with hopes that their vehicles’ tanks will last them longer than expected.

In order to cope with this epidemic, car companies are developing more fuel efficient vehicles that will send fewer consumers to gas stations and spur economic growth. Brad Hart of


\(^2\) [http://www.clearleadinc.com/autos/gasoline.html](http://www.clearleadinc.com/autos/gasoline.html)

\(^3\) [http://www.georgiagasprices.com/Prices_Nationally.aspx](http://www.georgiagasprices.com/Prices_Nationally.aspx)
Ezine Articles says that “Cylinder deactivation, or cylinder management, makes engines more fuel efficient by shutting off unnecessary cylinders. With this method, when a vehicle reaches cruising speed, fuel is no longer pumped to one or more of the engine's cylinders. Cylinder deactivation is applied to six and eight cylinder engines”\(^4\). According to Ford, the Ford Focus Electric is now the most fuel efficient five-passenger vehicle; the hybrid has a one hundred and ten miles per gallon equivalent city rating. The car also boasts a ninety-nine MPGe highway certification, which is seven more than the Nissan Leaf, which is second in that category\(^5\).

Companies like BP are producing cleaner fuels, and even investing in new ways of providing energy. According to BP Global, the company is now producing ethanol from sugar cane in Brazil. BP unleashed a program in 2009 designed to advance the development on new technology to convert sugars into biodiesel. The company’s main goal of these new five hundred million dollar investments is to develop sustainable biofuels that have a minimal impact on food supply and make tangible reductions in greenhouse gas emissions\(^6\).

Even though many companies are making positive strides toward creating a cleaner, more fuel-efficient planet, I believe that there is one fuel that should overrule them all: hydrogen. With gasoline prices at an all-time high and increasing, America needs a new plan that gives citizens one less thing to worry about when it comes to their car. Fuel cell vehicles (FCV) will eliminate the need to pay at the pump, as a citizen’s vehicle is powered by electricity. According to the Department of Energy, Fuel cell vehicles (FCVs) have the potential to significantly reduce our

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\(^5\) [http://media.ford.com/article_display.cfm?article_id=36099](http://media.ford.com/article_display.cfm?article_id=36099)

\(^6\) [http://www.bp.com/sectiongenericarticle.do?categoryId=9030052&contentId=7055186](http://www.bp.com/sectiongenericarticle.do?categoryId=9030052&contentId=7055186)
dependence on foreign oil and lower harmful emissions that contribute to climate change. FCVs run on hydrogen gas rather than gasoline and emit no harmful tailpipe emissions. Several challenges must be overcome before these vehicles will be competitive with conventional vehicles, but the potential benefits of this technology are substantial.”

There are a number of pros and cons when it comes to the hydrogen fuel cell vehicle idea. One of the main hurdles is customer reliability; FCV’s currently cost more than vehicles that run on gasoline. Also, fuel cell durability isn’t quite as durable as internal combustion engines. However, according to the DOE, FCV’s are better for the environment because they produce less greenhouse gas emissions. Less air pollutants will create cleaner cities and towns, as smog and other harmful particles will be eliminated with more FCV’s on the highway. Perhaps most importantly, these vehicles limit dependency on foreign oil [IBID]. Therefore, the more companies we have in America that produce FCV’s and other hydrogen products, the less America will rely on foreign countries for oil.

With these facts, I have formed my proposal that will eliminate the need for any fuel other than hydrogen that our vehicles will run on. This thirty year plan begins with a U.S. government mandate, stating that all fuels other than hydrogen shall not be used to power American-made vehicles. All vehicles produced in the U.S. must be FCV’s, which means that car companies must immediately stop production of their current vehicles and replace these vehicles with FCV’s. Although this does not seem like a popular idea, this proposal will save this country a very substantial amount of money in the long run, especially increasing our GDP and economic prosperity. We must slowly begin to replace gas stations in all American cities and

7 http://www.fueleconomy.gov/feg/fcv_benefits.shtml
towns with hydrogen filling stations for our FCV’s. Every gas station cannot be immediately demolished in a matter of months because most Americans rely on gasoline fueled vehicles. It will take a time period of twenty-five to thirty years to successfully replace most American gas stations with hydrogen fueling stations. Although most gas stations will be eliminated, this does not mean that Americans will not be allowed to purchase foreign vehicles that run on gasoline. For this reason, it will be mandated that each American city will be limited to a maximum of five gas stations per city.

This proposal will eliminate many oil programs in America like BP’s current oil program, which is investing in new oil alternatives. These programs invest a lot of money that give the American people options when deciding a number of vehicle related issues; with my thirty year proposal, Americans will only have to depend on hydrogen to fuel their vehicles. I also believe that the companies investing in these alternative fuels are unnecessarily wasting tax payers’ dollars on the programs. The companies’ fuel programs cost a lot of money in the first place, so eliminating and replacing these programs will save the country money in the long run.

It is not uncommon to think that the implementation of the new hydrogen programs will cost many people their jobs; for that is a fair assumption that may or may not be true. Citizens working for oil companies like BP will not lose their jobs if they are trained by that company on operating the new hydrogen cell technology.

The new plan will prove to be beneficial for colleges and universities as well, as students will be able to be introduced to new classes focusing on the development of hydrogen cell research. Therefore, the next generation of scholars will know more about the new technology, and be able to work successfully in the field of hydrogen fuel cell research. Years and years of
students studying this topic will translate into a smarter America, as we collectively move toward building a better planet.

By the year 2045, America’s streets will be filled with FCV’s, our economy will be flourishing in the area of energy, and the cost of living will decrease in the category of the average American’s spending on fuel. Our ozone will be healthier because the world’s most polluting country will begin to become one of the world’s cleanest countries. I am not a foreign affairs expert, but I believe our foreign trading partners will either hate the proposal and attempt to place economic sanctions on the U.S., or they will follow suit in our pursuit of a better world; I guess that only time can tell.

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