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A Road to A New Environment

Cars are one of the best sources of transportation, but can it also endanger the environment? Unfortunately, studies show that vehicles has been one of the top ten things that causes air pollution, leading to global warming and pollution (LaMarco, 2008). Interestingly enough, I am content at the fact that cars are now evolving, and that we can slowly deteriorate the existence of unpleasant global changes. With research, I was able to identify three cars that could change environment: air compressed, hybrid and electric, and how the history of car production, changed the world.

Henry Ford, one of the richest citizens of America to have ever achieved great potency of the 1900's, dominated the competitive market with his ingenious system of assembling cars. The system was a merely a line, called the "Assembly Line". The Assembly Line ran on a conveyer belt, it consisted several people with specific tasks. As the unfinished product moves forward in a line, several people were given a specific task like; tightening bolts and securing wheels, this made the production time of one car to an unbelievable amount of ninety three minutes. As of the current days of car production, we still use the conveyer belt trick, sadly, almost everything is made from robots, with each specific tasks. This type of production benefits the manufacturer greatly, but destroys our overall employment opportunities.

Before we talk about any cars, one must understand what kind of fuel runs the cars of today. An astounding ninety eight percent of all Americans use them (Quinn, 2007). What most of our citizens don't know is the fact that it pollutes the environment and causes global warming. Gasoline, also known as petrol, is a chemical mixture of petroleum which is in charge of internal combustion engines (engines that our current cars use today). If u didn't know, gasoline is made in oil refineries where crude oil is distilled. This type of resource has something called; hydrocarbons, which contains several hazardous chemicals. Chemicals like benzene (causes leukemia), toluene (causes nausea and weakness), and naphthalene (damages red blood cells) are always in gasoline (Wikipedia). Luckily, if you are exposed to such a high amount of gasoline, there are several laboratory urine or blood tests which determines exposure to gasoline, sadly, these tests are not available for in an average doctor's office. These tests measure contaminated compounds in your body (Quinn 2007).

By now, you are probably thinking, "how can gasoline get to the environment ?" Well, with the widespread of several disasters such as; leaks, spills or improper disposal of gasoline contaminates groundwater, air soil, and surface water. the leakage in pipelines or storage tanks can also cause gasoline to infiltrate groundwater and soil. Gasoline can also be released into the one thing that we breathe in; air, only when large tanker trucks are filled and emptied and when you fill your car at the service station.

When the word "hybrid" comes to mind, what do you think of? As famous as it is, hybrid cars are probably the first thing you would think of, but believe it or not, hybrids can be frequently seen. Basically, a hybrid is a fusion of two things, an example would be a mule

or a peanut butter jelly sandwich. Hybrid cars are vehicles that use two sources of power. The primary source (for example, gasoline) provides half of the power. The other source provides the other half of the power. This helps the environment greatly. If the whole world used hybrid vehicles, we would be able to save 50% more gasoline (Contributor 2006).

A Hybrid Car functions like any other vehicle. Commonly known for its dual engine function with the use of a “sub-spec” (substitute specific) resource like electricity, or kitchen grease combined with gasoline. One of the amazing things about the hybrid is its passive way of earning free electricity. This passive way of earning electricity is called regenerative braking, where you produce electricity by converting a car’s kinetic energy to another form, the kinetic energy is produced when your brake line causes friction and heat is made.

One of the forms of energy in cars is called: Kinetic Energy. Certain objects that have the capability of moving, like a roller coaster, have kinetic energy (KE). If a certain car were to crash into a wall at 5 mph, the damage that the car would have taken would be very small, if it hits the wall at a shocking 60 mph, the car will probably be in death row, and would cause a recoil. An energy that is similar to Kinetic, would be potential energy. If the object were heavy, and acceleration is constant, the kinetic energy would probably increase with a certain formula.

Every time you step on your vehicle’s brakes, little did you know that it wastes energy. Physics explains that energy can never be broken down. When a car slows down, the momentum of the kinetic energy that makes the car accelerate forward, requires another location to inhabit. The Majority of it usually becomes heat, additionally, it has no use. Fortunately the magnificent

hybrid provides a braking system that puts the useless energy to use. The regenerative braking system is a mechanism that slows the vehicle, by converting the kinetic energy into one form, that can be stored for later or used immediately. Regenerative braking's most common form, involves the use of an electric motor as an electric generator. Just like the electricity from railways, the electricity that was generated is returned to hybrid vehicles battery for later use.

With the combined powers of fire and steam, it was possible to create certain engines. In the 1600's, believe it or not, hybrid vehicles existed through the power of steam. Such vehicles like the steam boats, steam trains and steam wagons were very unique and eye-catching, just as how we see hybrid cars today. Some of the inventors were talented engineers, and had the passion of creating vehicles that would make transportation much easier. An astronomer and Engineer; Ferdinand Verbiest, created one of the very first steam vehicle for a Chinese emperor named Khang Hsi, this vehicle was widely known in this generation because of its uniqueness innovation. In 1999, the first Hybrid Car to hit the market from Honda had branded the world of change, this means the competition for Hybrids has begun (Anonymous, 2006).

With further interests, I wanted to actually learn about hybrids from a car dealer's perspective. Mike, a car dealer from Honda in Van Ness street, had agreed to converse with me about hybrids. "Hybrids are a wonderful thing! They save you in the long shot!" He said it with such excitement, it seemed that he was passionate about them, "cars like these would probably range around twenty thousand dollars to thirty thousand, it should really be considered when buying a car, it saves money." I also asked if hybrids were the best solution to having a greener earth. Sadly not, said Mike, "hybrids may be a temporary solution, but realize that they need

battery replacements every now and then, we still don't know how to properly dispose of them.”

As he continued to talk, he mentioned that San Francisco is one of the top cities that sells and uses hybrids as a personal transportation. I was also itching to know about the drive feel of a standard car and a hybrid, so I asked him about it. “Yes! it is very different!, the regenerative breaking system changes everything, kinda feels smooth too.” After the interview, I felt inspired to drive a hybrid. I also learned a lot of things to consider when my day comes to decide which car to choose from.

We all know that gas prices are increasing rapidly because soon enough, we will deplete all of our resources. Vehicle consumers are now trying to create wiser decisions to whether they should switch to hybrids. Consumers realized that they could save tons of money and help support the environment. Sadly the hybrid cars are not high in demand, a local car dealer would struggle to sell these to a customer (Toyota 2011). In conclusion, if you have enough money to buy a car that ranges from twenty-thousand or more, consider the hybrid, as it benefits the environment and your wallet.

In between the years of 1832 and 1839, an engineer named from Scotland named Robert Anderson, created the first electric vehicle, an electric carriage, sadly it was not rechargeable. In order to produce the electrical charge, the vehicle needed a hand crank, by cranking the wheel with human labor, the vehicle will be pushed forward. In 1895, fascination had struck the hearts of many engineers, in hopes of making money, they had made similar vehicles. When the century had changed in 1900, America had become successful, and had an abundant amount of cars in the market. Steam, electric, and gasoline cars were becoming more popular. Sadly

electric cars were declining fast due to an abundant amount of reasons. Roads were created to connect cities together, but electric vehicles could not reach the expected mileage, the Texas crude oil was so cheap, that every consumer thought about vehicles ran by gasoline, and Henry Ford created vehicles that were cheaper than the electric. With the uprising of cars in the 1900's, cars were very expensive to numerous amounts of people, they could only pay the money up front. Since paying in bulk was a major problem for both the consumers and producers, a new beneficial system was made. The new system allowed consumers can now pay the purchased car every month for a fraction of the price. In conclusion, people were more motivated to buy due to the low pay amount. The producers were also able to produce a steady income.

An electric car is a vehicle that is solely powered by electricity. In order for this car to recharge, it must be plugged at home or a recharge station. One of the many benefits of an electric car is the zero pollution and ignition feature where an engine called the "Internal Combustion Engine" absorbs fossil fuels, and releases the pressurized consumed gas through a nozzle, polluting the air in the process (Wikipedia). Traditional cars and electric cars are a mile away from being close. Electric cars have more wires, while as gas-powered cars, have a lot of fuel lines, hoses, and pipes. Believe it or not, electric cars are more dominate in distance than a regular car (Nice, 2010). As time passes by, the popularity of electric cars is increasing due to the abundant amount of people wanting to change how they drive. Unlike gas-powered vehicles, electric cars are now ranging from around twenty eight thousand to forty thousand dollars, this can be a slap in the wallet. In the meantime, there are only a few companies that sell them like; American Electric Vehicles, Tango, and General Electric Motors. With high hopes and expectations several individuals predict that the prices will eventually drop due to the increased

numbers of high demands, and companies will have chances to create their own electric vehicle.

The uniqueness of an electric car stands out for its energy use and maneuverability. Unlike a regular car, an electric car rider, can identify several differences between the two vehicles. With the existence of the electric car, it makes gasoline an obsolete resource. With the electric car's title of being eco friendly, many people are thinking twice about buying one. Although electric cars maybe nifty and unique, it still isn't generalized to the public like the traditional cars. Being similar to the hybrid, electric cars also use the regenerative braking feature. Just like a regular car, an electric car also has to refuel with a resource, but luckily, an electric car's battery can be quickly replaced from a nearby car station so you can quickly get things going.

Imagine a a car that's smooth, shiny, slim and runs on free gas, a car of your dreams! Your possible dream car could be the air compressed car. You may think that the idea of using air to run a vehicle is too impossible, but If the idea was a success then why bother with gases and electricity ? Air is an unavoidable, non-polluting, and clean natural resource in our planet, it cannot be depleted. Best of all, air is free. If we were to harness this natural resource, and use it for vehicles, what do we get out of it ? Introducing: air compressed cars. These cars are vehicles that are solely powered by air motors, or other resources such as: gasoline, diesel, or ethanol, it can be debatable as a hybrid car. To clearly explain the air compressed cars, think of it as a balloon. When the balloon is filled with air, energy is actually stored inside. The balloon holds the energy, and once a sharp material stabs the surface, the compressed air escapes the balloon and a quick explosive burst is seen. Sadly, it might take two hours to fully fill the tank. Air cars

run on an engine called: Compressed Air Engine (CAE) developed by the french company Motor Development International (MDI), it's responsibility is to contain the compressed air. Once the compressed air is released, the pipes will eventually push against the pistons and into the crankshaft creating a top speed that can go up to thirty five miles per hour.

Since the air compressed cars are powered by the CAE, we won't be seeing any type of "car farts" if you know what I mean. Air compressed cars can also help the economy, due to it's cheap eighty-five cents per gallon fuel. This natural gas has the title of being extremely environmentally friendly. It is presumably the cleanest process of burning all fossil fuels, and only emitting very little carbon dioxide. Air compressed cars have been approved by the EPA (Environmental Protection Agency) for being good for the environment. If this car is generalized to the public, we will be seeing an immense amount of stations that can be found right on our own neighborhood. If natural gas refinery stations existed, this could greatly help out the economy, sadly, we are in our poorest state. If the stations were to open up, thousands of jobs for the unemployed will be offered. We could also trade these gases to other countries. If any cracks were to occur in the gas tank, the fuel would just dissipate into the air with no harm done. Unlike regular cars, oil spills can create several unthinkable disasters. Overall these flawless qualities make this gas a dominant compared to it's rival; oil and gasoline.

In a teenager's perspective, i believe the majority of the teens here in America doesn't care about our environment. If we were to be asked why, then the top reason would probably be because we don't know anything about it. In my personal opinion, the environment's conditions should be presented to the minors. The way our children and parents bond together can possibly shape this world by sharing information with one another. In fact, our teenagers are the future of this world, and should really understand how life is going to be like without a clean environment.

Overall, if we don't do anything about this environmental dilemma, we will suffer along our luxury. People just need to step up their game and help the world out. From gasoline, to electric and air compressed vehicles, there is a possibility of changing our world. Hopefully, in a certain amount of years, our world should change with the upcoming technologies ahead of us.

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